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MOTORCYCLE ILLUSTRATED

TEN CENTS
A COPY

ONE DOLLAR
A YEAR

Vol.
7

THURSDAY, JULY 11, 1912 547966

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
14

300 Miles in under 300 Minutes!

The *Indian* Motorcycle

On June 20, C. B. Franklin riding a 7 H. P. Indian covered 300 miles in 282 minutes, 31 $\frac{3}{5}$ seconds.

This achievement was part of a record smashing performance of six hours' duration on the Brooklands Track in England.

At the end of two hours Franklin had covered 131 miles, 1,735 yards, and his distance for six hours was 1,725 yards.

World's record for a motorcycle run over two hours during this run. Average speed over 62 miles an hour, and the only motorcycle

on the Road!"

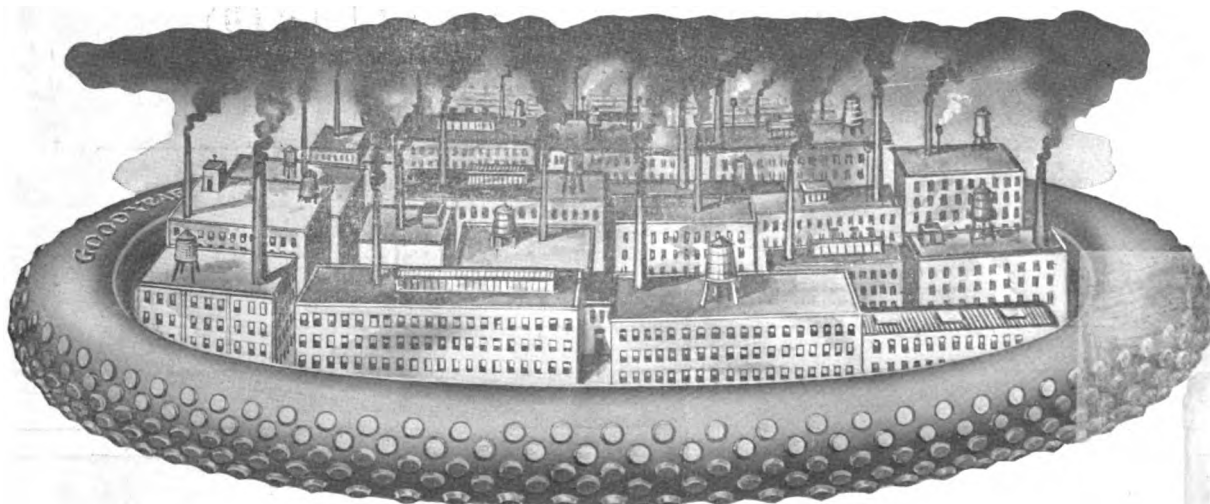
O., Springfield, Mass.

(Manufacturers in the World)

AN FRANCISCO

LONDON

Twenty-Seven Motorcycle Manufacturers Now in Goodyear Ring



The Concerns listed below have made contracts for

**The Most
Durable Tires
in Existence**

GOODYEAR
AKRON, OHIO
Motorcycle Tires

**Little Brothers
of Goodyear
No-Rim-Cuts**

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Aurora Automatic Machinery Co., Aurora, Ill.—Thor
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Detroit Motorcycle Mfg. Co., Detroit, Mich.—Detroit
Emblem Mfg. Co., Angola, N. Y.—Emblem
Excelsior Motor Co., Chicago, Ill.—Excelsior
Flanders Mfg. Co., Pontiac, Mich.—Flanders
Greyhound Motor Works, Buffalo, N. Y.—Greyhound
Harley-Davidson Mfg. Co., Milwaukee, Wis.—Harley-Davidson
Henderson Motorcycle Co., Detroit, Mich.—Henderson
Hendee Mfg. Co., Springfield, Mass.—Indian

Ives Motorcycle Corporation, Owego, N. Y.—Monarch
Marvel Motorcycle Co., Hammondsport, N. Y.—Marvel-Curtiss
Miami Cycle & Mfg. Co., Middletown, O.—Merkel
Minneapolis Motorcycle Co., Minneapolis, Minn.—Minneapolis
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Schickel Motor Co., Stamford, Conn.—Schickel
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HOLD E

Thirteen years of tire building experience is back of Goodyear Motorcycle Tires.

Countless tests have proved them to be the most durable tires in existence — tests in

which every make has been given a fair chance.

These tests, open to all, leave no reason for doubt. They prove the truth of our statement — as do

insist
on in-
prycle
dly on

Bulletin : June 29, Brighton Beach, N. Y. Elks' Field Day—
52 1-5 Previous record, 55 3-5. Both riding Goodyear
Wednesday Evening, June 26, at Riverview Park,
minutes, 24 seconds. Tires standing up good. (Signed) Seymour.
Goodyear Motorcycle Tires win 6 events out of 8 at Rochester Motor
Columbus Motorcycle, July 4, Seymour makes three miles in 1 minute
Hasha and Seymour both go mile in 37 1-5 seconds. All new world's

THE GOODYEAR TIRE
We Make All Kinds of Motorcycle Tires

Time,
x miles, 4

3 seconds.

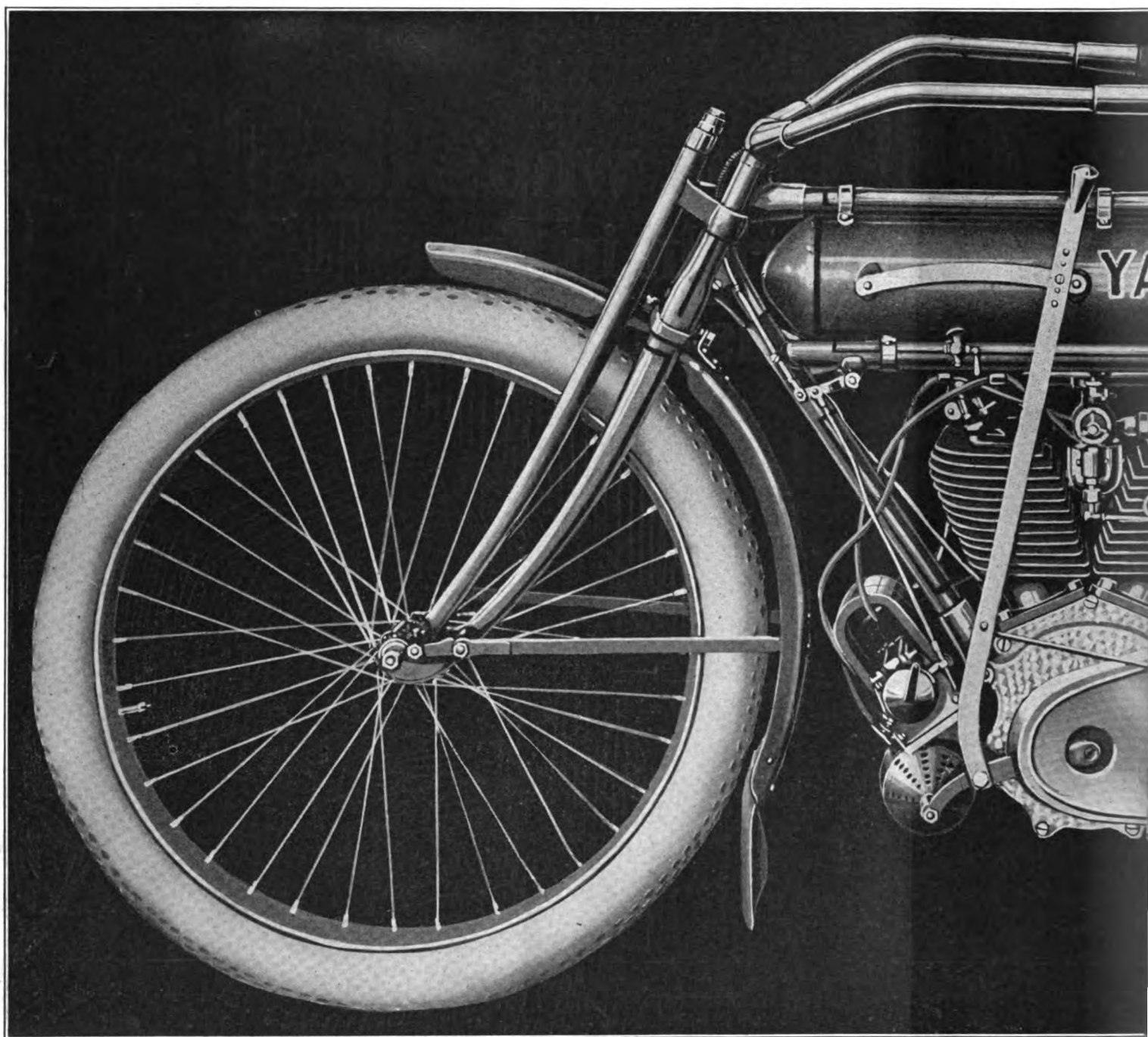
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Oh! Look who's here!
And right in front
as usual





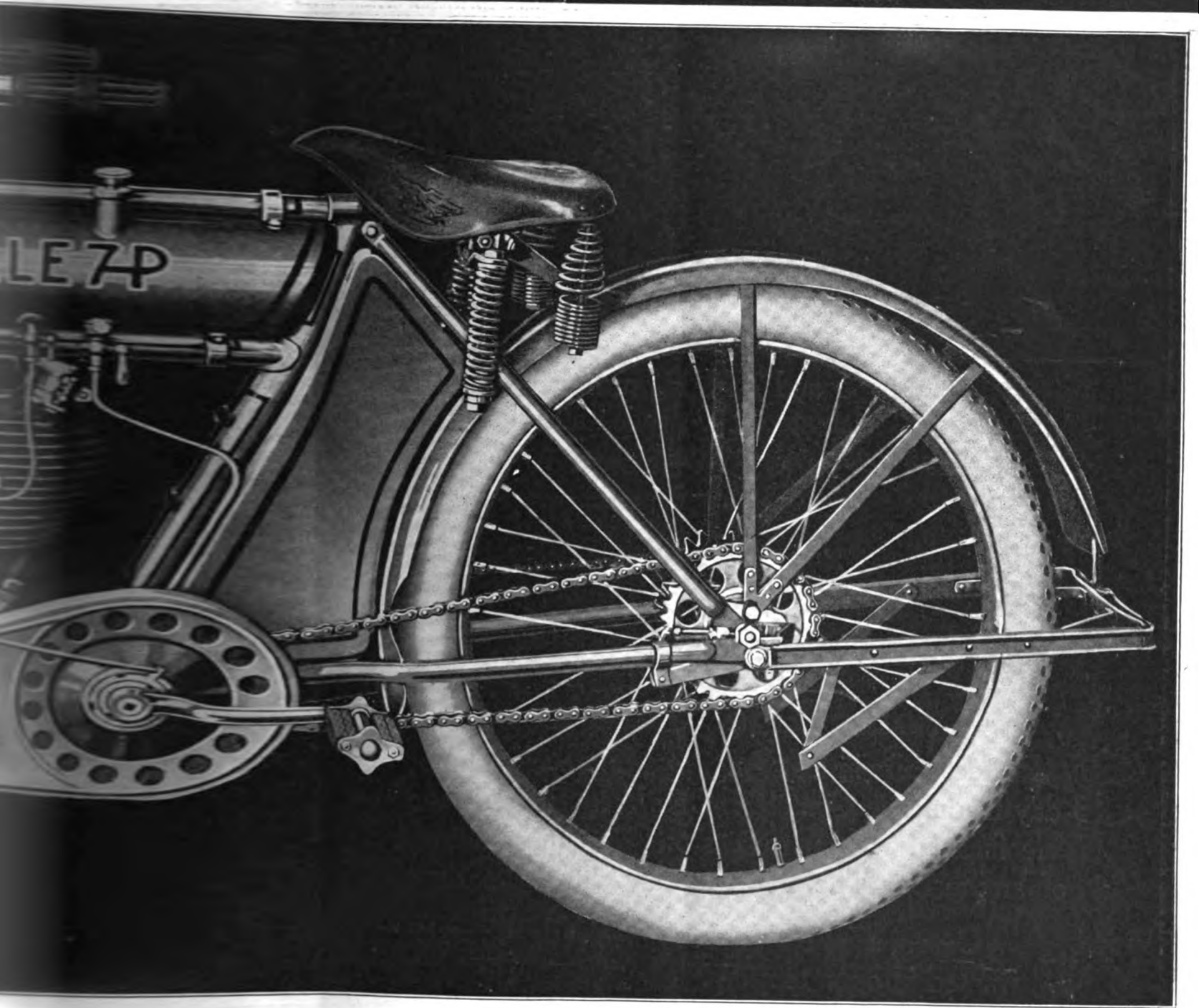
It's the Yale-the YALE.

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CO., (Member M. M. A.) 1730 Fernwood Ave., Toledo, Ohio

The Yale

The Kingpin of Motorcycles

Singles and Twins

5 and 7 H. P., furnished with chain or belt drive.
Celebrated Y-A shock absorber and 29 x 2 $\frac{3}{4}$ " tires—
10% oversize. Regular equipment.

Some Yale "Doin's"

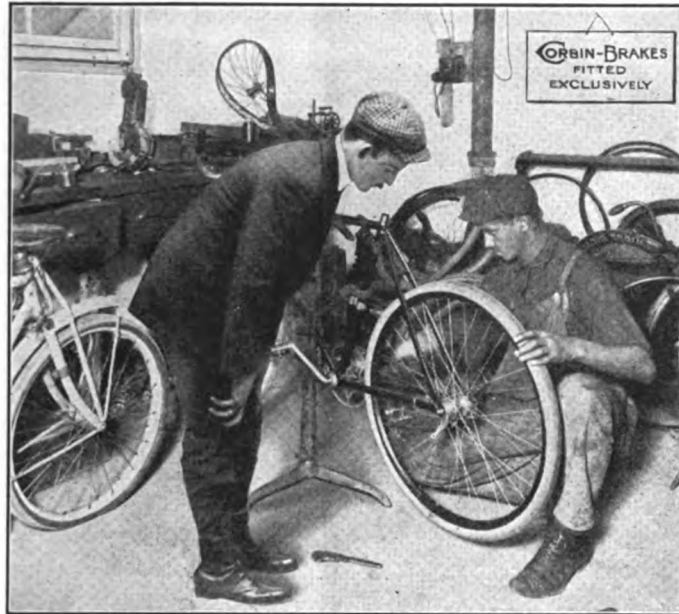
Perfect score in Los Angeles Motorcycle Club's
3-day Endurance Contest. One Yale entered, one
Yale finished with perfect score. Highest average
of any make. The Yale you buy will do the same.

Orders shipped same day received. Agents
wanted in open territory.

Write for literature today.

**Consolidated Mfg. Co., 1730 Fernwood Ave.
Toledo, O.**

ANY BICYCLE REPAIR SHOP CAN MAKE YOUR WHEEL SAFE!



The Corbin Coaster Brake

can be fitted to the rear hub of your wheel within fifteen minutes. You owe it to yourself and others on the road to insure instant and absolute control of your machine at all times.

Steep hills, sharp turns, railroad crossings and dark nights have no terrors or risks for the rider whose wheel is Corbin equipped.

The Corbin Two-Speed Coaster Brake and the Corbin Duplex Coaster Brake are recognized everywhere as the standard safety and control devices for bicycles.

The Corbin Brake for motorcycles is part of the equipment of over 40% of all the motorcycles in use in America today. Insist on it if ordering a motorcycle. Better be safe than sorry.

You can get Corbin Brakes at all live hardware and bicycle dealers. Dealers: Order from the Jobber.

Write in for our Free Catalog showing all Corbin Models

THE CORBIN SCREW CORPORATION

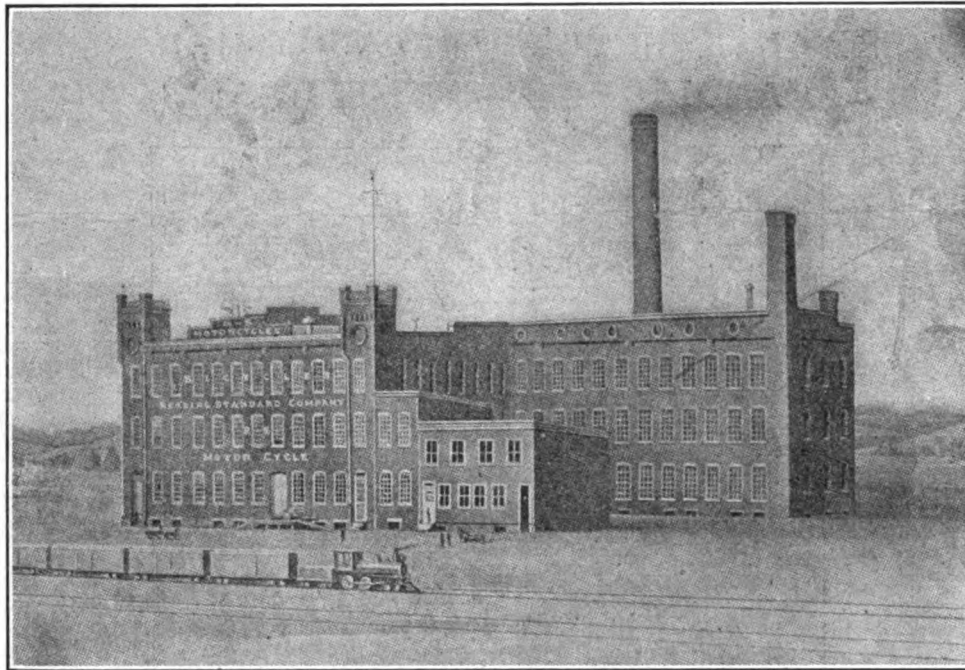
(Division of the American Hardware Corporation)

Licensed Coaster Brake Manufacturers

NEW BRITAIN, CONN.

WESTERN DEPARTMENT: 65-67 West Lake Street, Chicago, Ill.

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Where they come from

We're Busy!

DAY and night, our big plant is kept going, trying to keep up with the tremendous rush of orders which come pouring in daily.

But as long as the R-S machine is made with the painstaking care now employed in its manufacture, the ***demand will always exceed the supply.***

We are not letting this rush of orders turn our heads. We have had too much experience for that. It is at



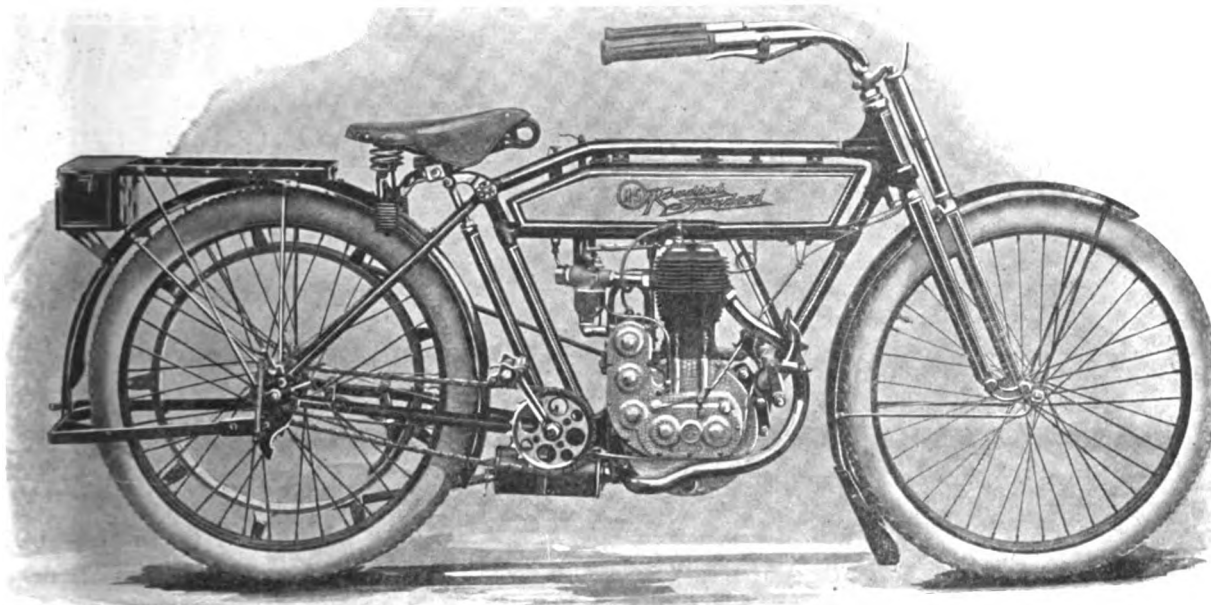
such a time, when the demand is at its height, and machines are hurried to keep up with orders—then it is that little mistakes are permitted to creep in—little imperfections overlooked; inspections slurred.

But in our plant, no matter how great the rush, intense concentration on the work in hand—rigid inspections—absence of waste-producing haste—are the order of the day.

READING STANDARD COMPANY

306-340 Water Street, Reading, Pa.

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We're Very Busy!

YOU see, we figure this way. A little delay is soon forgotten, especially when a machine gives the supreme satisfaction that an R-S affords. On the other hand, immediate deliveries avail nothing if, at every turn of the wheel, new faults are found, imperfections come to light, evidences of hurried careless manufacture are discovered.

Every R-S is made with the absolutely accurate pre-



cision which only high grade machinery, skilled labor and keen inspections can give.

Combine the undoubted fundamental superiority of the R-S with our policy of making each machine "the" R-S and not merely one of a lot, and you have the basis of our claim that the R-S is THE FINEST MOTORCYCLE IN THE WORLD.

Let us tell you more about it.

READING STANDARD COMPANY

306-340 Water Street, Reading, Pa.

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June 17th, 1912.

Motorcycle Illustrated, 51 Chambers St., New York, N. Y.

Gentlemen:--Thank you very kindly indeed for the three copies of the Motorcycle Manual which were received Saturday. I am giving one of these to Mr. J. S. Steuer, our Pacific Coast Musselman Coaster Brake Missionary, and another to Mr. E. W. Adams, our Pacific Coast Representative. The clothbound copy you may rest assured the writer will zealously guard on his own desk, and if you have not already sent to him we would appreciate very much if you would let us have one copy for our Mr. W. K. Aurandt, and another for our Mr. E. J. Cortines, our Southern Salesman, and the third for Mr. W. M. Sheets, our Central West Coaster Brake Missionary.

The writer has looked the Manual over and wish to congratulate you, as it is certainly a valuable compendium of information, and I do not see how anyone who might be interested in motorcycles could afford to be without a copy.

With best personal regards from the writer, we are

Yours very truly,

THE MIAMI CYCLE & MFG. CO.

Val-JM.

F. L. Valiant, Assistant Sales Manager.

THE MOTORCYCLE MANUAL

Is the LAST WORD on the subject of a publication giving comprehensively and in a handy form ALL the information required by a motorcycle rider or dealer. 104 pages, printed on coated paper.

Motorcycle engine and frame parts illustrated and fully described—their functions fully explained, with a remedy for every possible trouble.

It also tells you how to tour; gives the motorcycle laws of every state; official racing records, hill climbing, horsepower and other formulae, and a complete directory of the motorcycle trade. Pages are magazine size, 7 x 9 inches.

Paper covers, 25 cents, postpaid.

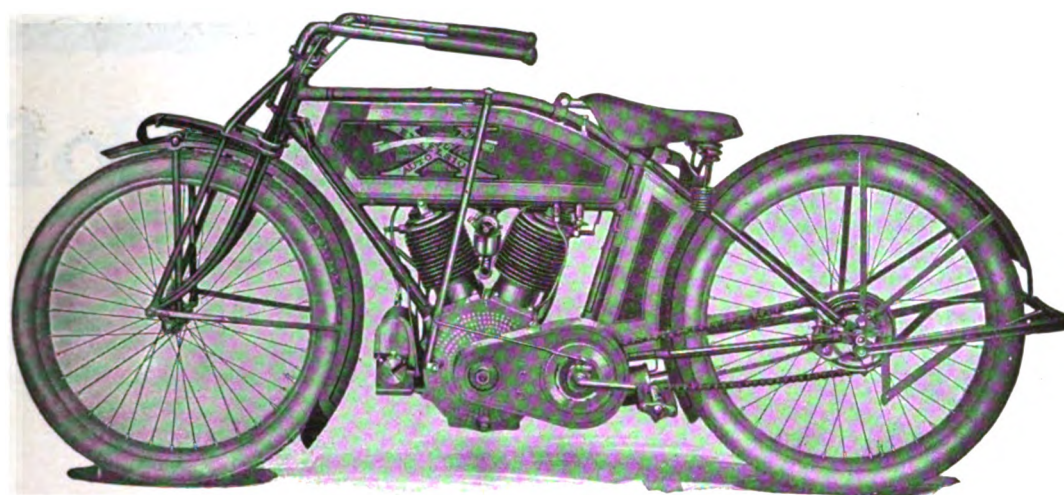
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For \$1.25, we will send you a copy of the Motorcycle Manual and also enter your subscription to Motorcycle Illustrated for one year

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EXCELSIOR LAUTO-CYCLER

July 10th begins the third year of unvarying success for the Excelsior Twin

And the engine on the Excelsior Twin you buy today is practically the same as that of the first Twin we turned out July 10, 1910. This is not because we have stood still, but because our previous experience insured the Excelsior Twin engine would be right before we put it out.

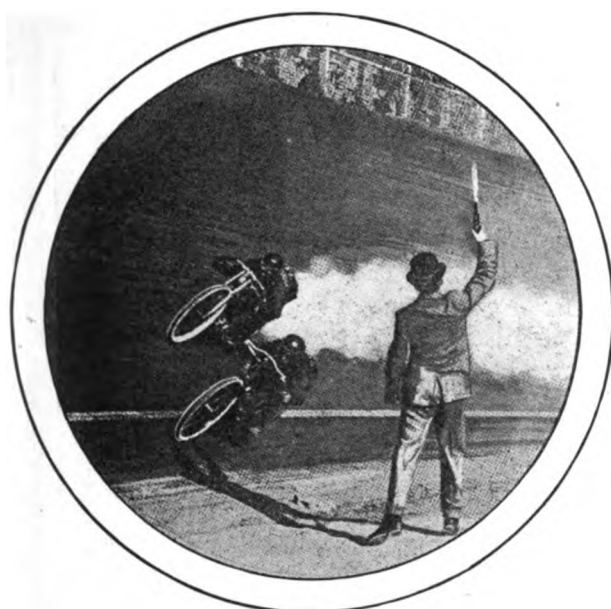
The Excelsior Twin has proved itself to be as good as we hoped—as good as the Excelsior single. It has led the field in speed, reliability and economy. All Excelsior speed records have been made with the same design motor as the stock Twin.

The first Excelsior Twin we built has covered 47,000 miles, and it is still going. The 1912 engine is just as good—more than that, we contemplate no change in our engine for 1913.

Get an Excelsior and you can be sure you have the most in speed, reliability, comfort and economy that the motorcycling industry can give.

EXCELSIOR MOTOR MFG. & SUPPLY COMPANY

2201-2259 UNION STREET, CHICAGO



A Chain of Evidence "The Coventry" Chain

Speed

Through the gruelling test of the track and the hill-climb, "The Coventry" Chain comes unscathed. "The chain with lightning speed" has time and again demonstrated its superiority, and for noiseless, frictionless action "The Coventry" Chains are efficient plus.

Strength

Can you imagine a more terrific strain on a motorcycle chain than that of a speed of 52 miles an hour up-hill? That's the time O. C. Godfrey, the Tourist Trophy Winner, made at the Mt. Anglaust Hill Climb at Collomiers, France. It must be admitted that such terrific speed puts an undue strain on the transmission. But "The Coventry" Chains, with a breaking strain of 3,600 pounds to the foot make light of a task such as this.

Dealers—Write

Sarco Engineering

112 Broad Street

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Endurance

It's the day in and day out kind of service that a man demands, and often does not get from his chain. For plugging road work, for the terrific strain of negotiating mud and sand and snow, "The Coventry" Chains are eminently fitted. They are the product of years of chain manufacturing experience, high class material, keen inspections and merciless tests on the road. Every Coventry Chain is well worked in before it reaches the buyer. Each chain undergoes at least 2,400 inspections before it is pronounced O. K. That ought to satisfy YOU.

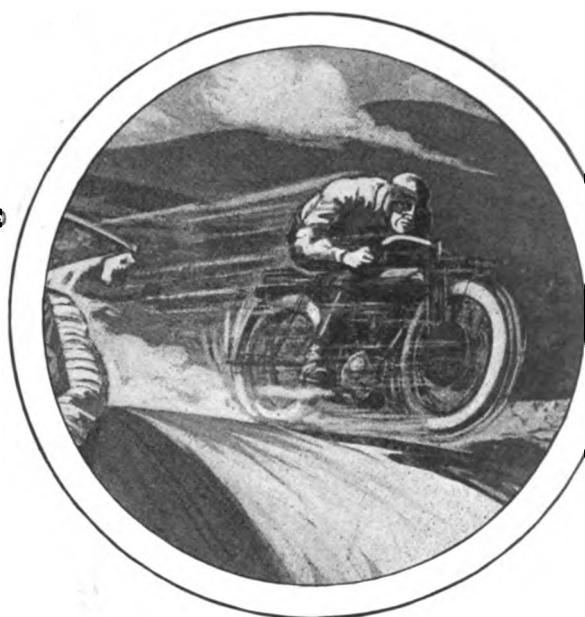
Distinctiveness

"You can't mistake the shape." At the end of each link of "The Coventry" Chain is an elliptical projection. This "nose" serves to distinguish the chain at all times. It also serves another and more important purpose—it positively adds twenty per cent. to the life of the chain. This projection is formed by a reinforcement at the end of the inside plate, a double thickness of steel is employed at this most vulnerable point of the chain. This is an exclusive feature, and to be found only on "The Coventry" Chains.

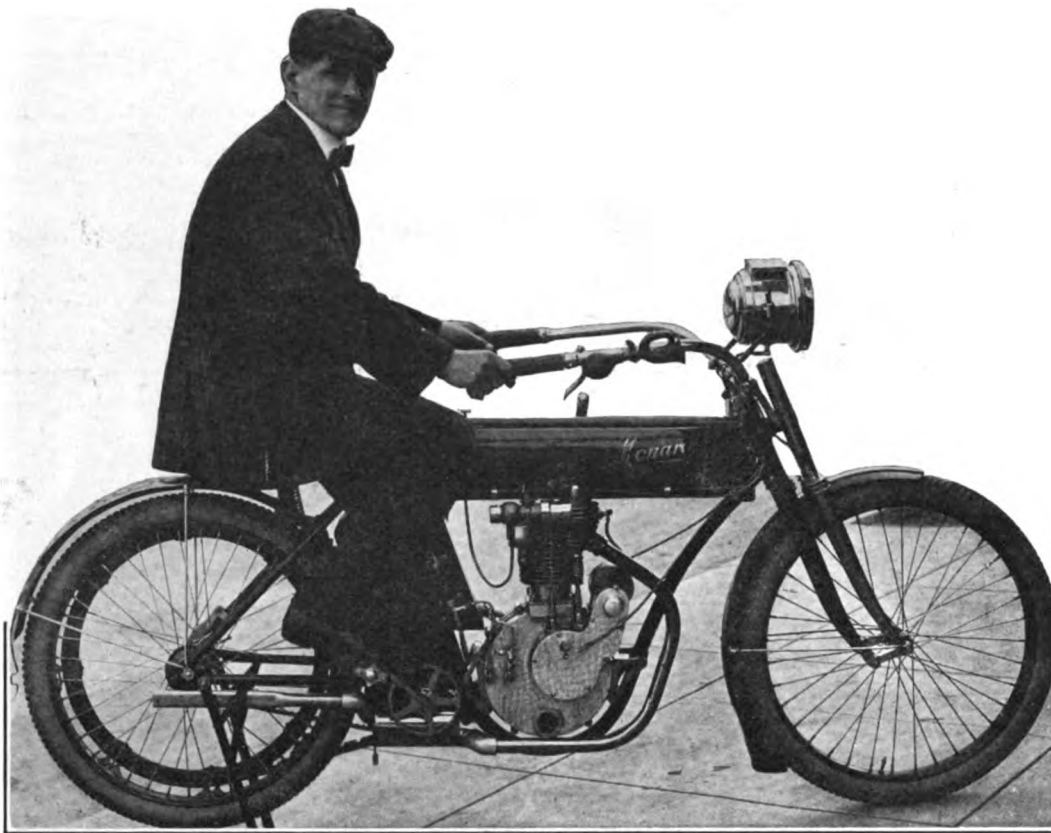
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POULTON WINS ON EMPIRES

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CLARENCE H. MACKAY, President

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Mr Paddock, Mgr Empire Sales Co.

852 Main st Bfo.

Monarch Big 5 Wins Gold Medal Brooklyn Southampton 200 Mile
endurance run equipped Empire tires.

Ives Motor Cycle Corpn. 1025am

EMPIRES ALWAYS WIN

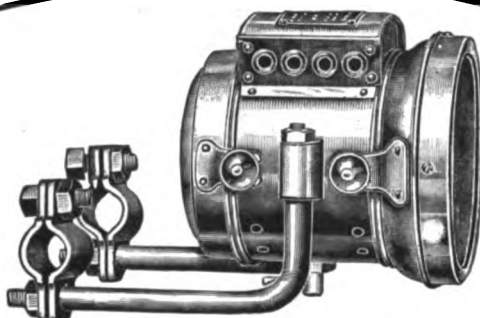


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The 20th Century Limited



Two Leaders of America



SEARCHLIGHT No. 108, showing back closed.

LIKE the 20th Century Limited, *20th Century Lamps* are recognized as the leaders in their field. They can be depended upon to see you safely to your destination through the darkest night—reliable and efficient always.

20th Century Lamps are constructed on the same principles as the Big Naval Searchlights—they are made to project a powerful ray of light for a long distance straight ahead (the only direction where the light is needed to avoid danger).

Another Point: The cleaner the lens, the more brilliant and powerful the light. The "Open-door-to-the-lens" feature of 20th Century Lamps permits easy access to the lens for cleaning purposes.

The experience of expert lamp manufacturers of a quarter of a century, guarantees the mechanical perfection of 20th Century Lamps, both bicycle and motorcycle. 20th Century Generators are perfect in point of efficiency, appearance and compactness. They can be readily opened—no screw-threads to become crossed or tightened.

READ THIS STRONG TESTIMONIAL:

BEATRICE, Neb., June 26, 1912.
 Twentieth Century Manufacturing Co., 422 Ogden street, Newark, N. J.
 GENTLEMEN:—I have used a No. 2 model of your lamps for over a year, and it has given splendid satisfaction. I have had experience with the Solar, Searchlight and Columbia lamps, but I have never had as good a lamp as yours. It gives more light, and I have less trouble with it than with any of the others. Let me know what a No. 6 model will cost me delivered to Beatrice. The dealers here do not carry your lamps in stock. I don't know why, because I think it is the best lamp on the market. Thanking you, I am,
 Very truly yours,
 L. J. KOEFF.

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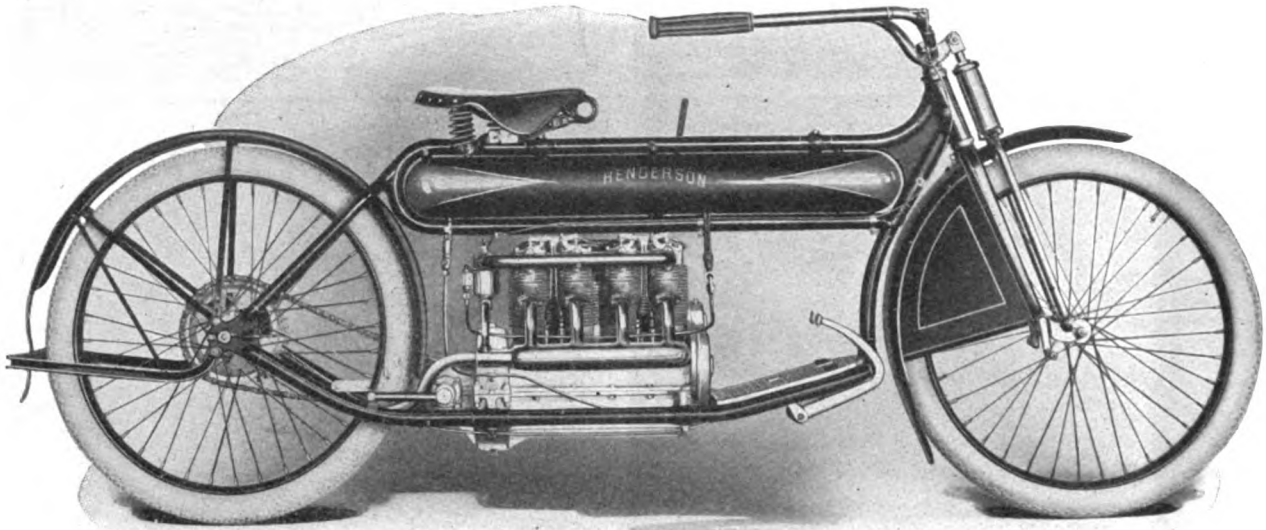
20th Century Mfg Co

420-422 Ogden Street
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Reasons why the Henderson is sweeping all before it



7 h. p. 4 Cylinders; free engine, chain drive—\$325.

HENDERSON MOTOR CYCLE

It is no task to explain the widespread grip the Henderson has taken on the nation's motorcycle business.

It is due to the Henderson's advantages of no noise, no vibration, little or no road shock, no waste of power and a motor flexibility rivaled only by that of a four-cylinder automobile.

These, in turn, are the results of structural features not found in the ordinary motorcycle:—

The powerful four cylinder motor; its suspension low in the frame; the clutch which makes it a free engine; the starting crank; the long wheelbase; the low saddle position; the range of spark control, 60 degrees instead of 20, etc.

These are the features that no motorcycle of the Henderson's price has ever before offered.

These are the features that appeal mightily to the public; things the public really wants.

So the Henderson gives the motorcycle buyer the sort of a machine he has waited for.

Is it any wonder that the factory is unable to keep pace with the demand?

Is it any wonder that every Henderson dealer is happy and satisfied?

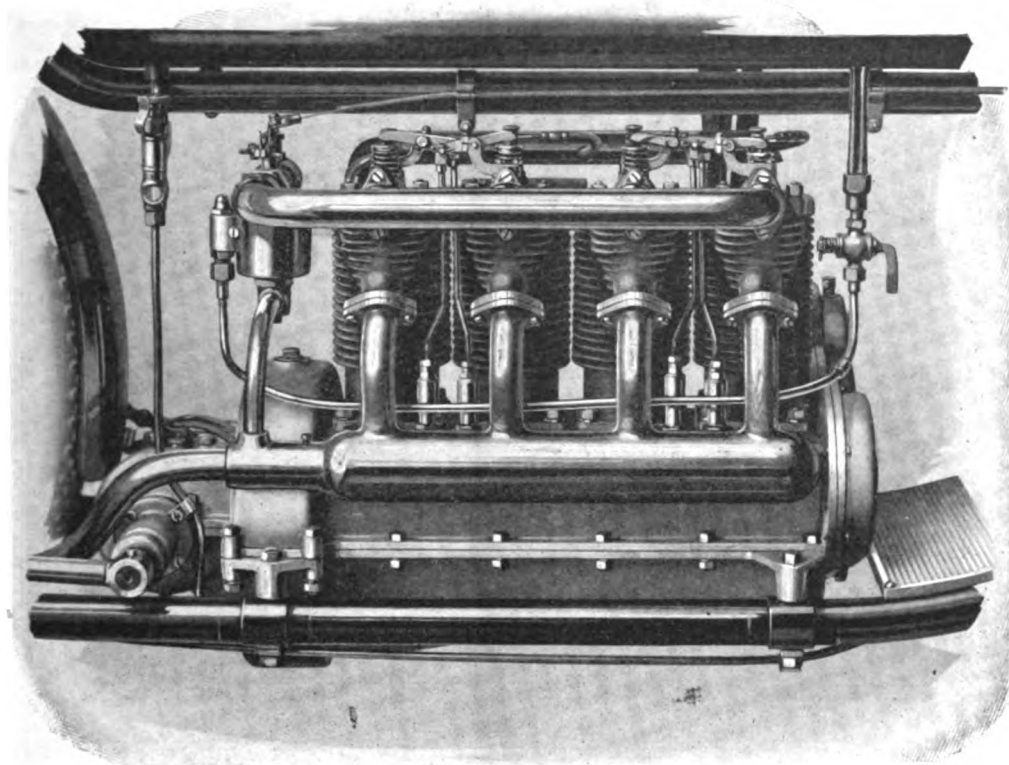
These results are the results that logically should follow the production of a machine with so many exclusive advantages, of such reliability and such high quality.

We shall be glad to send literature and answer all questions.

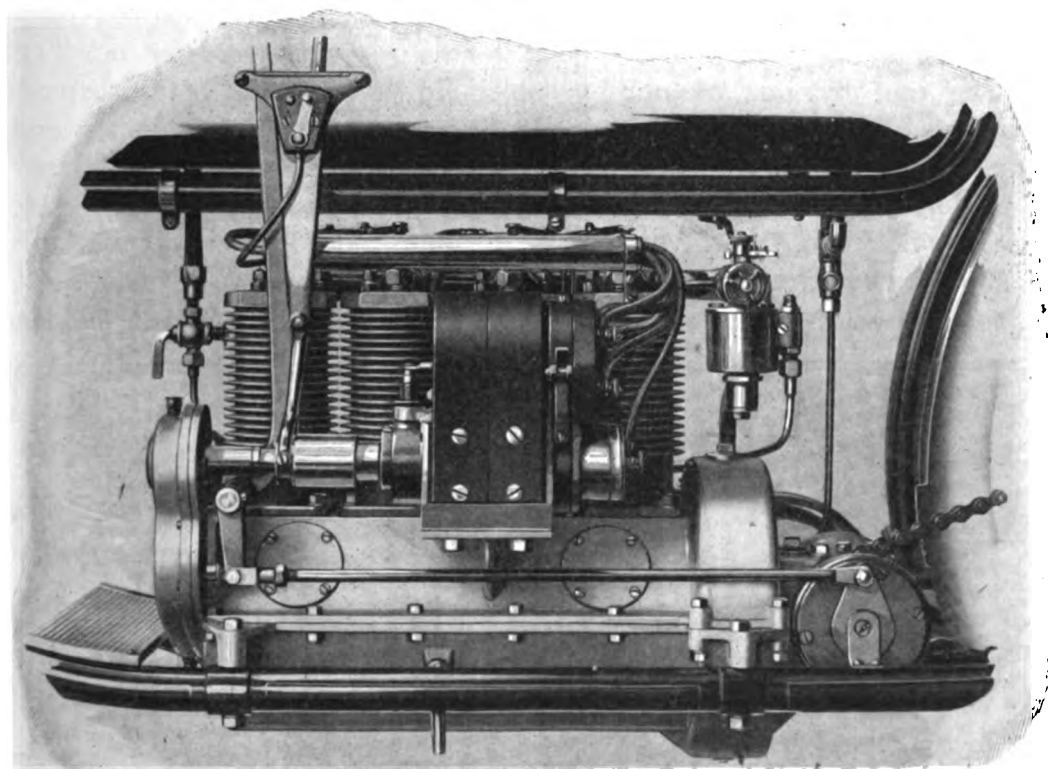
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THE MOST FLEXIBLE, THE MOST EFFICIENT, THE SMOOTHEST RUNNING MOTORCYCLE MOTOR BUILT



Valve Side of Motor



Magneto Side of Motor

HENDERSON MOTORCYCLE CO., 1158 Cass Ave., Detroit, Mich.

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OLD SOL

"The Sun's Partner"

A feature of the "Old Sol" lamps to which we want to call special attention, is its adaptability. The needs of the most discriminating motorcyclist are sure to be met by one of our numerous models.

If his taste runs to self contained lamps of moderately strong power, there is our "Old Sol" No. 4, throwing a light of 400 candlepower strength. Price of No. 1 Lamp, with Brackets, \$5.25

Then if he wants a lamp whose light is positively the strongest, the most intense and farthest reaching on the market, we offer our "Old Sol" No. 8, throwing a light equal to 1500 candlepower, the brilliancy and intensity of which can only be equalled by a few automobile lamps. No other lamp manufactured for motorcycle use can compete with "Old Sol" No. 8. Price of No. 8 Lamp, with Brackets, \$7.50

Dealers—The "Old Sol" line is Your Line.

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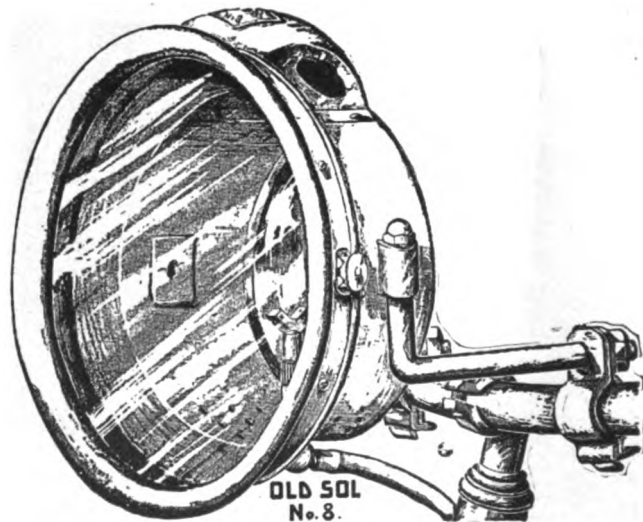
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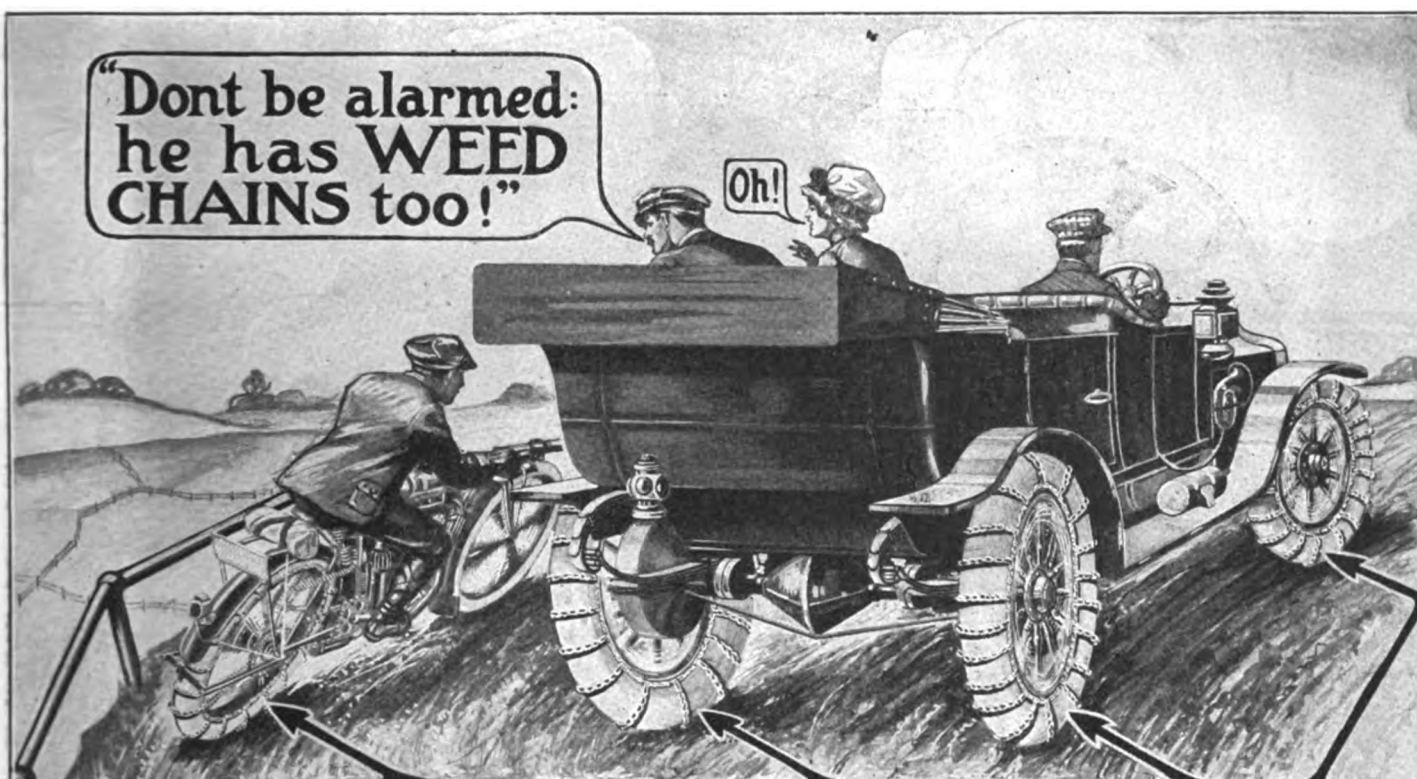
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Kindly always mention the paper when writing to advertisers.

"Don't be alarmed:
he has WEED
CHAINS too!"

Oh!



NECESSARY FOR THE MOTORCYCLE - AS THEY ARE NECESSARY FOR THE AUTOMOBILE

Necessity is the Mother of Successful Invention

THE insistent demand for a Motorcycle Anti-Skid Chain proved to us that it was a *necessity*. We have therefore produced **Weed Anti-Skid Chains for Motorcycles**—just as perfect in principle, construction and workmanship as **Weed Anti-Skid Chains for Automobiles**, which are so recognized as a tested, tried and time honored necessity that we are now *manufacturing and selling over forty miles of Weed Chains every day in the year*.

Weed Anti-Skid Motorcycle Chains

With the "Creeping Grip"

Give perfect traction, *prevent skidding and slipping*. Make motorcycling absolutely safe—sixty miles an hour—with perfect safety—make *all roads good roads*.

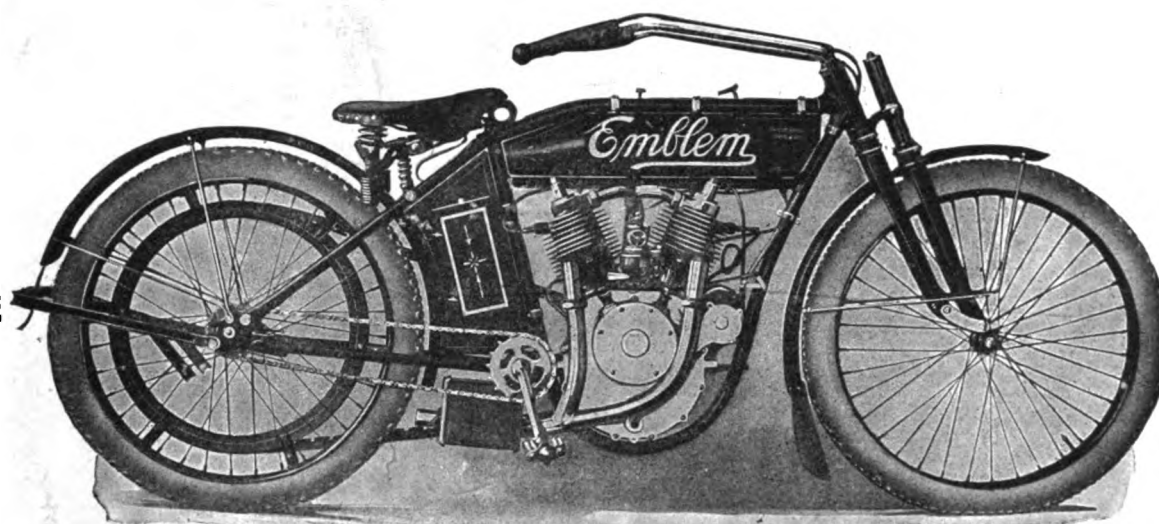
The continuous "creeping" prevents injury to the tires and keeps them clean, minimizing the chances of punctures.

The secret process of hardening the cross chains, just adopted, gives extreme lasting qualities.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write us direct for full particulars.

Weed Chain Tire Grip Company, 28 Moore Street, New York



The Emblem

“The Eager Motorcycle”

Strength—speed—power—reliability—the four necessary qualities, are best represented in the Emblem. It is always ready—eager—capable. While it is master of every road, yet it is *your* servant—an ever-economical means of “arriving.”

**Our catalog is
ready for you**

Emblem Manufacturing Company

ANGOLA, ERIE CO., N. Y.

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GOODRICH MOTORCYCLE TIRES

**MADE IN BOTH THE CORRUGATED TREAD AND
THE LARGE STUD TREAD WITH THE CENTER
RIB—BOTH SOLD AT THE SAME PRICE.**

The choice between the two treads is merely a preference with the rider. Both made from extra heavy fabric of the best Sea Island Cotton—and the unusual thickness of the best Para rubber of the Tough Tread makes this Motorcycle tire supreme.

**THE REAL SERVICE TIRE FOR YOUR MOTOR-
CYCLE—ARE YOU GETTING THE SATIS-
FACTION WHICH COMES TO THE
USERS OF GOODRICH TIRES?**

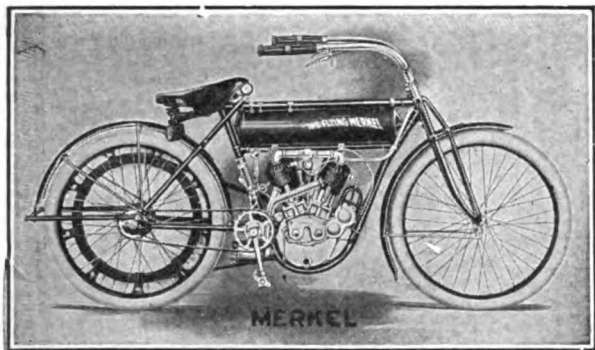
“BEST IN THE LONG RUN”

The B. F. Goodrich Company
Factory, AKRON, OHIO

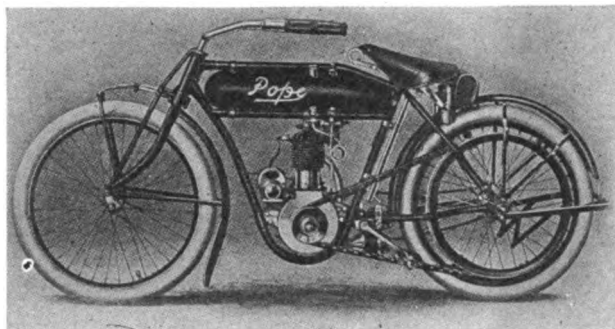
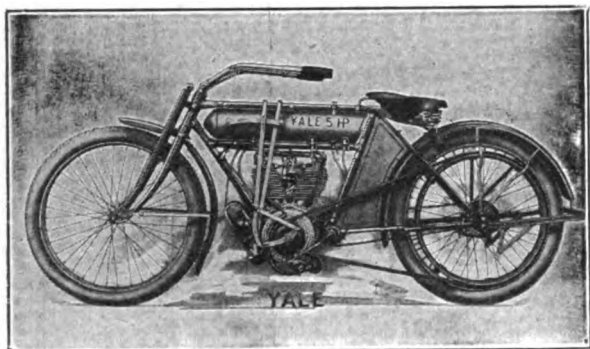
Largest in the world



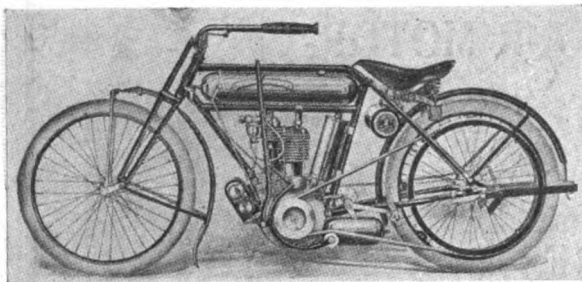
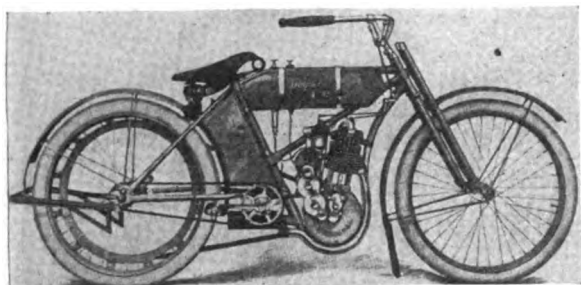
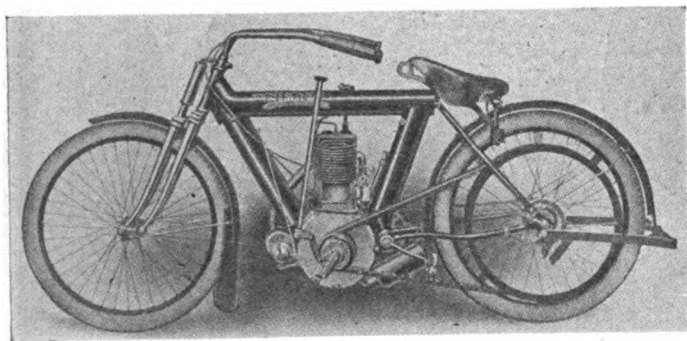
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**THE FLYING MERKEL.**

It is a bird, and always good for a long, swift flight.

**THE POPE.** The little wonder. A good goer with much staying power.

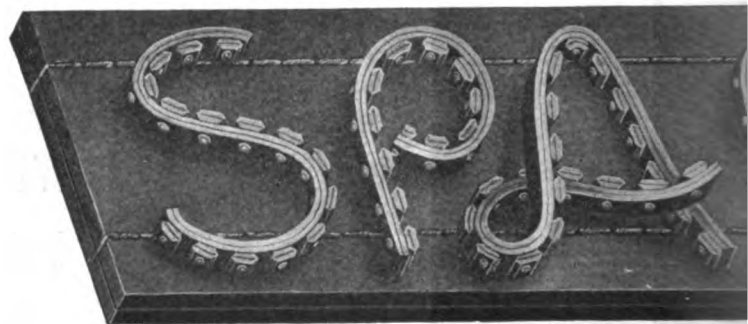
The Yale never fails. Always reliable and sure.

**THE M & M.** Brockton's Best. Tried and true.**THE WAGNER.** The "Quality" Motorcycle. Always on the job.**THE PIERCE.** The Beauty from Buffalo. It acts as well as it looks.

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F. A. M.

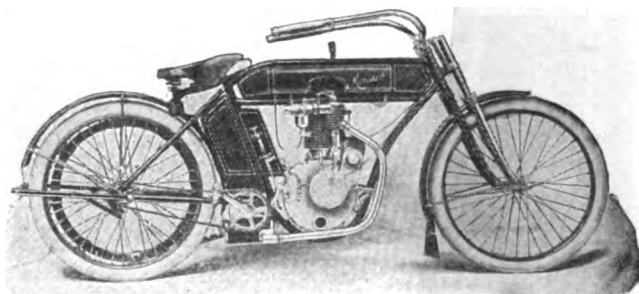
With a New Meaning

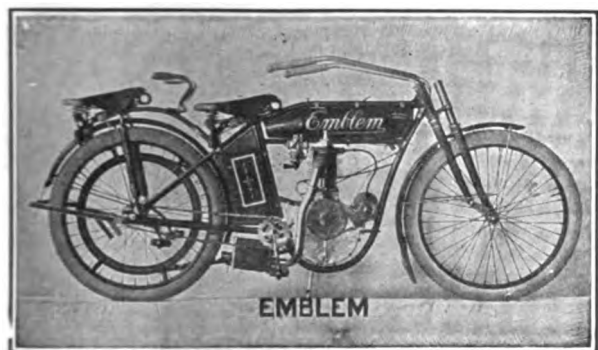


Graton & Knight Mfg. Co

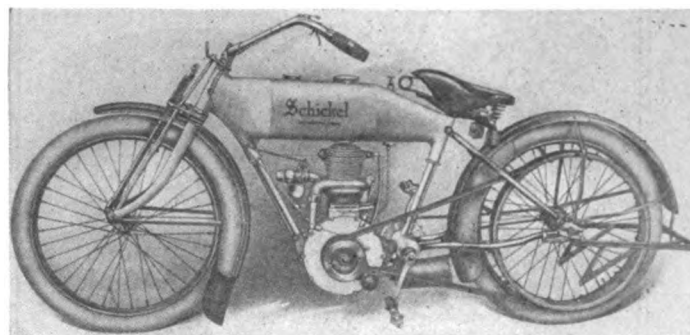
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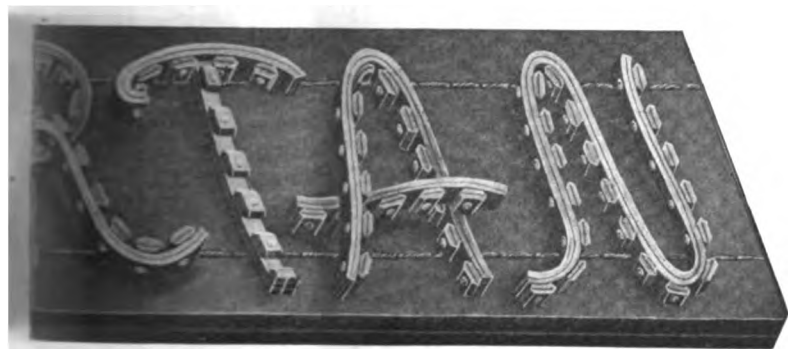
THE EMBLEM. The Husky, Trusty Emblem.



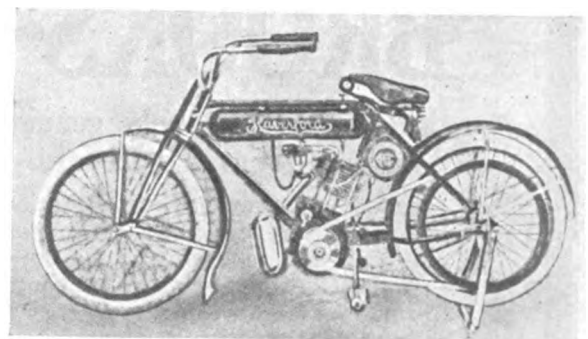
THE SCHICKEL. The Master Motorcycle. Elegant and Efficient.

Dealers and Riders, Specify Spartan Belts

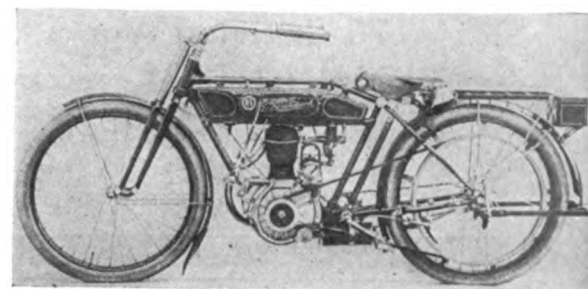
**Foremost
Among
Motorcycle Belts**



THE FLANDERS is a machine of "class" at a price for the "mass."



THE HAVERFORD.
The "Big Noise" of Philadelphia. Staunch and Sturdy.

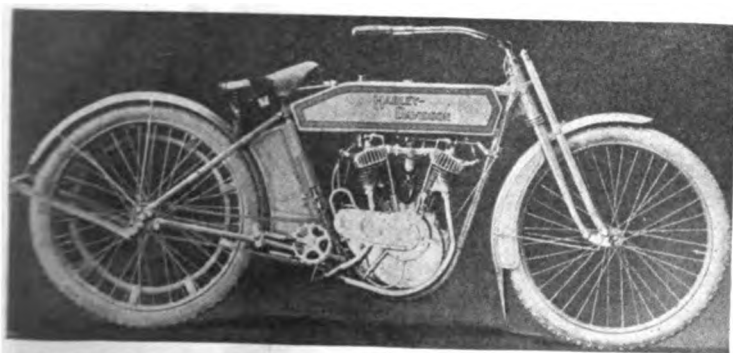


THE READING-STANDARD.
"Built and tested in the Mountains." High in quality and efficiency.

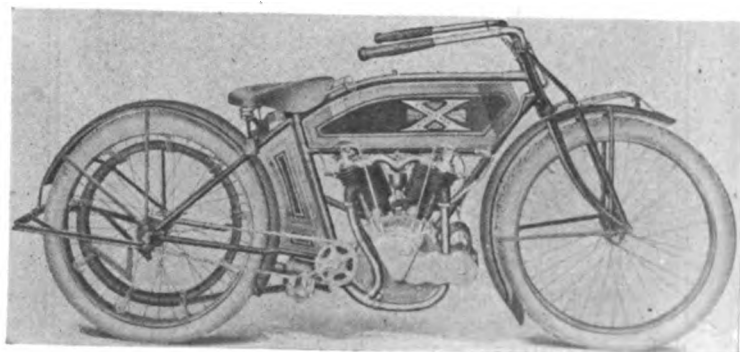
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THE HARLEY-DAVIDSON. The Silent Gray Fellow, whose deeds speak louder than words.



THE EXCELSIOR. A Top-notch. Up to the mark on speed and endurance.
When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED.**



The BROOKS B170—seat part consists of carefully moulded steel base, comfortably cushioned and covered over all with substantial leather. Being anatomically shaped you sit IN it rather than ON it.

Saddle Service

If every Motorcyclist knew the value of a perfect saddle-service, he would invariably select the

BROOKS—

the original and only genuine compound-spring saddle—

because—the ravages of vibration, his deadliest enemy, are completely overcome by its exclusive feature—the BROOKS Patent Compound Springs—a feature obtainable only in the saddle that bears that name.

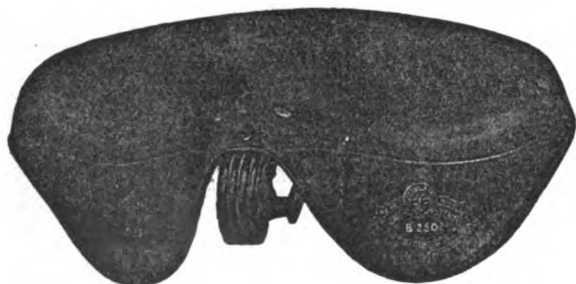
You should test it!

J. B. BROOKS & CO., Ltd.

75 Criterion Works

BIRMINGHAM, ENGLAND

Distributing Agents for U. S. A.—The D. P. HARRIS
HARDWARE CO., 48 WARREN ST., NEW YORK



The BROOKS B250—a low-built seat specially designed for motorcycles of the non-peddalling type. The leather top is beautifully moulded to shape and of extremely comfortable proportions.

You'll Make No Mistake

if you say Colonial—and insist on having it—because it's an oil that can be depended upon, made by a firm with a reputation of over thirty years' standing for high-class products.



COLONIAL MOTOR OIL

Medium Grade

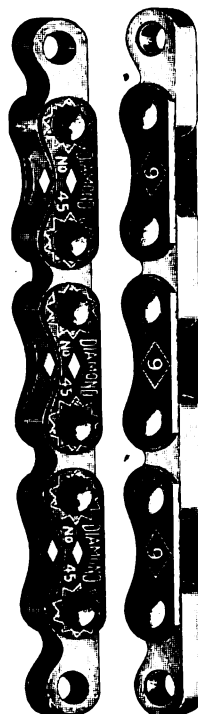
is expressly prepared to meet the conditions of motorcycle lubrication, which differ radically from automobile lubrication.

SILEX GREASE

The greasiest grease made

The real test of a grease is not its looks or the feeling but its lubricating properties. SILEX is made to lubricate and last.

"When we put out a Diamond Chain we never hear of it afterwards"



Years ago the Davis Sewing Machine Co. decided upon Diamond Chains. They have had no regrets since, as evidenced by their testimony above.

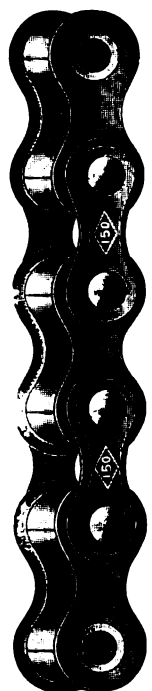
It's the high grade material, accurate workmanship and our pioneer experience in chain making that make such lasting friends for Diamond Chains, and have made these the standard equipment for the past 21 years. When buying a new chain, know what you are getting. Look for the Diamond trade-mark on the connecting link.

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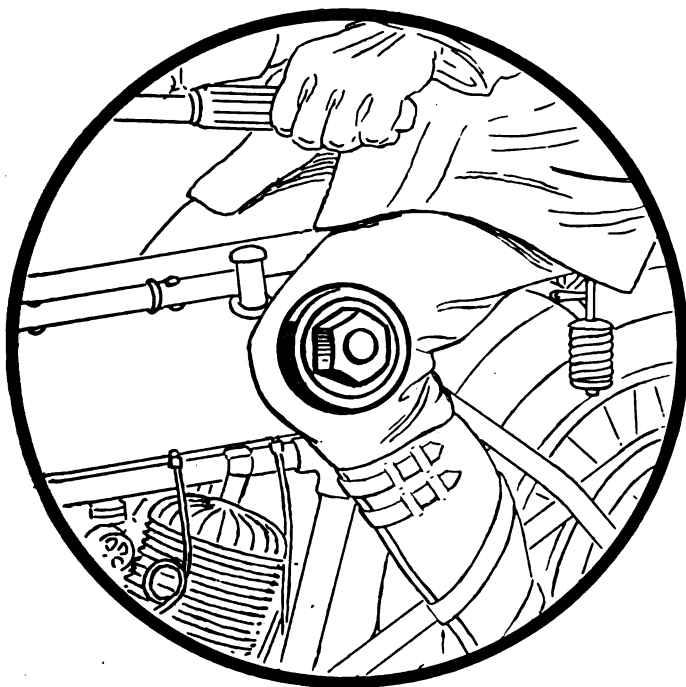
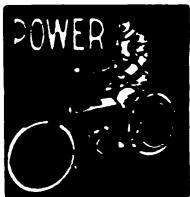
Diamond Chain & Mfg. Co.

227 W. GEORGIA STREET, INDIANAPOLIS, IND.

8,000,000 FEET PER YEAR



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Are Your Knees Shock Absorbers ?

SADDLE springs or any of these spring-seat-post arrangements simply turn your knees into shock absorbers. They keep the rider doing a continual jumping-jack stunt with his knees as the hinges. Riders of



don't get stiff and sore—there are no grouches. It's the only motorcycle with a Spring Frame and Spring Fork. This unique form of construction makes "The Flying Merkel" the "world's most comfortable motorcycle."

Have you a copy of Catalog "B"?

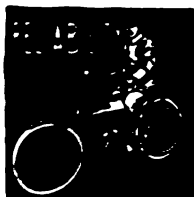


The **Miami Cycle & Mfg. Co.**
MIDDLETOWN, OHIO
MEMBERS OF N.A.A.



California Distributors.....The Appeal Mfg. & Jobbing Co., Los Angeles.
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(46)



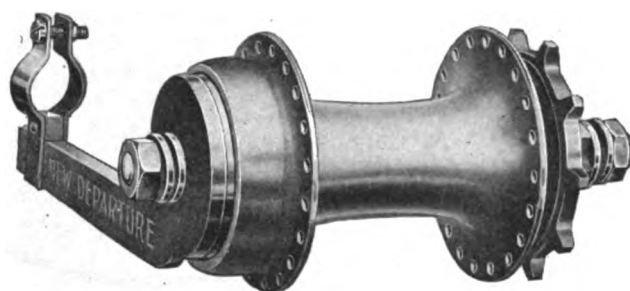
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NEW DEPARTURE

Motorcycle Specialties

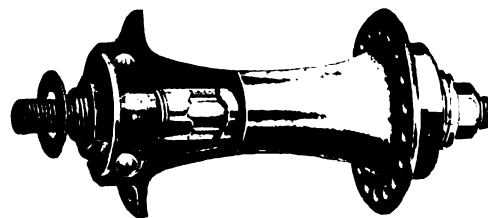
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



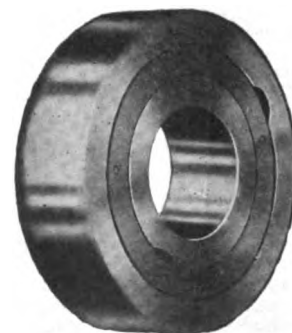
"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and gives maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen $\frac{1}{4}$ -inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

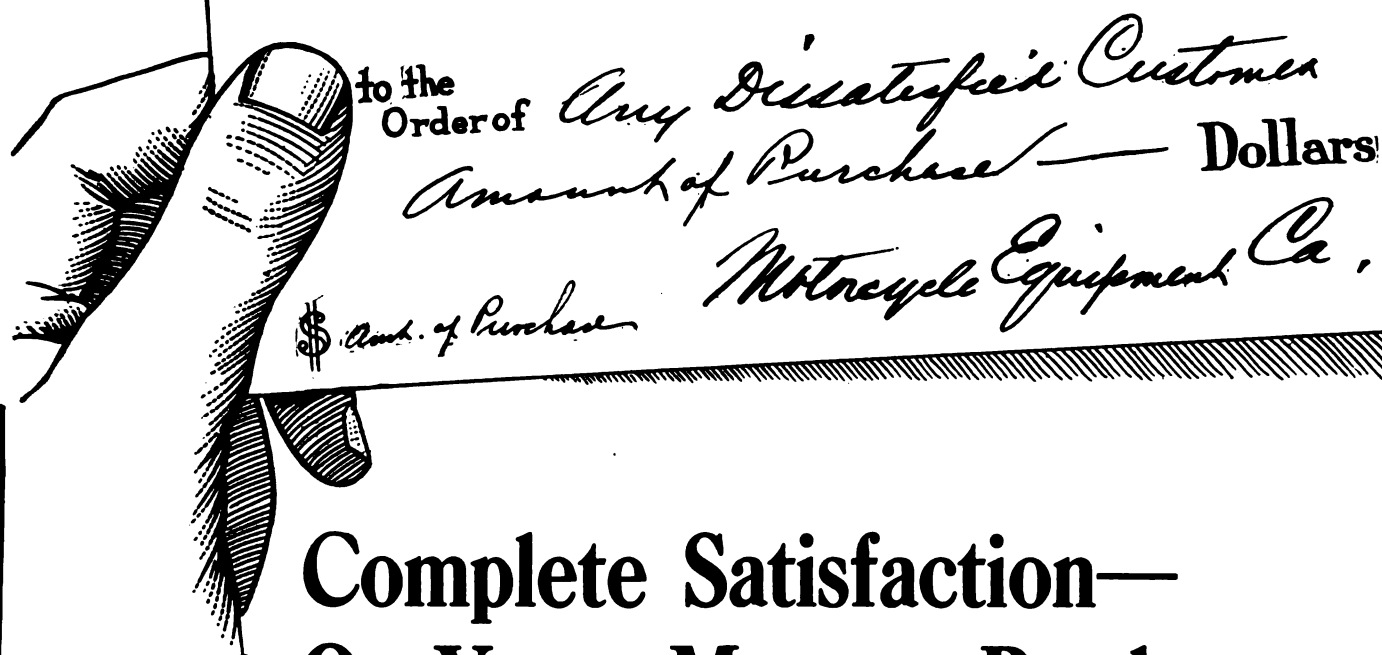
New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



Write Today for Literature

THE NEW DEPARTURE MFG. CO., Bristol, Conn.
COASTER BRAKE LICENSORS

No. 1 The Square Deal Bank



Complete Satisfaction— Or Your Money Back

It is on this basis that we built up the largest Motorcycle Supply Business in America. We **guarantee every article which we carry in stock.** We cheerfully agree to return the purchaser's money, plus transportation charges, if he is not absolutely satisfied with his purchase. Our stock comprises 773 articles, designed to meet every requirement of the motorcyclist, even the most remote. These features of our business have made

MECO SUPPLIES

a by-word for quality, satisfaction and honest dealing.

Our big catalog can be secured by dropping us a postal card. Remember, you are invited to try any of the articles listed therein, **at our risk.** Your money isn't ours until you are satisfied.

Dont forget to write today

ORGANIZED 1904 INCORPORATED 1910
MOTORCYCLE EQUIPMENT CO.
 LARGEST MOTORCYCLE SUPPLY HOUSE IN AMERICA
 HAMMONDSPORT, NEW YORK

Be Sure It Is

PREST-O-LITE

"The Light Universal"

Ask Any Experienced Motorcyclist

He will tell you the advantages of Prest-O-Lite on your machine.

One accident on the road at night, due to poor light, costs many times the price of Prest-O-Lite.

If you are going to ride after dark, don't trust to the poor, unsatisfactory, unreliable light of a generator.

Don't get any "imitation" lighting system that is not backed by complete service.

Don't experiment. Don't take chances. Profit by the experience of thousands and get Prest-O-Lite—
When you buy your machine

Insist Upon Prest-O-Lite!

It is the ONLY gas tank that is backed by universal service

If you are a "stay-at-home," the chances are you don't need any light on your machine.

But if you are going out on the open road—if you are really to realize the joys of your motorcycle—you must have service.

You will find Prest-O-Lite Exchange Stations in practically every city, town and village in the

country. 15,000 agencies that guarantee you service no matter where you go.

And one point more—the best time to get Prest-O-Lite is when you buy your machine.

Ask the dealer how much it will cost you to have Prest-O-Lite put on.

If you want any further information about Prest-O-Lite we will gladly send you our Motorcyclist's Booklet, showing how the small tank is easily attached to any machine. Ask for it today.

Price of Tank \$10

EQUIPPED WITH GAUGE



Dimensions: Length, 18 1/4 inches; diameter, 4 inches; weight, 3 1/2 pounds.

Our Handy Rule and Gasoline Gauge sent on request. Measures gasoline in tank; flexible for measuring tires, etc.

The Prest-O-Lite Company

246 EAST SOUTH STREET

INDIANAPOLIS, INDIANA

BRANCHES AT: Atlanta, Baltimore, Boston, Buffalo, Chicago (2), Cincinnati, Cleveland, Dallas, Detroit, Denver, Indianapolis, Jacksonville, Kansas City, Los Angeles, Milwaukee, Minneapolis, New York, Omaha, Philadelphia, Pittsburg, Providence, St. Louis, St. Paul, San Francisco, Seattle.

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EXCHANGE AGENCIES EVERYWHERE

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TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per

day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4.....\$5.50	28 x 2 1/4.....\$6.50	28 x 3.....7.25
26 x 2 1/2.....6.00	28 x 2 1/2.....6.75	29 x 3.....7.50
	28 x 2 3/4.....7.00	

Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. BRICTSON, President
The Bricton Mfg. Co.
2572 Bricton Building
Brookings, South Dakota

O. A. Bricton,
President,
The Bricton Mfg. Co.,
2572 Bricton Bldg.,
Brookings, So. Dak.
Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

Name.....
City..... State.....
County.....

DEALER'S COUPON.

MOTORIST'S COUPON ORDER BLANK.

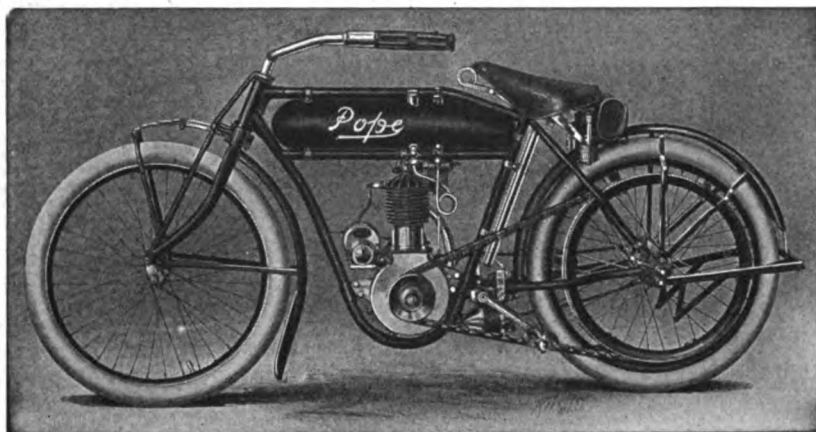
O. A. Bricton,
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The Bricton Mfg. Co.,
2572 Bricton Bldg.,
Brookings, So. Dak.

Enclosed please find.....
in the sum of \$.....for which
ship by ex. or fgt.....(quantity).....Bricton
Motorcycle Treads, size.....with the understanding if they
are not perfectly satisfactory I may return them within 10 days
from receipt of shipment and you will refund my money.
Signed.....

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POPE MOTORCYCLE

Model H, with Imported Magneto, \$165



Simple to
Operate

Comfortable
to Ride

Easy to
Handle

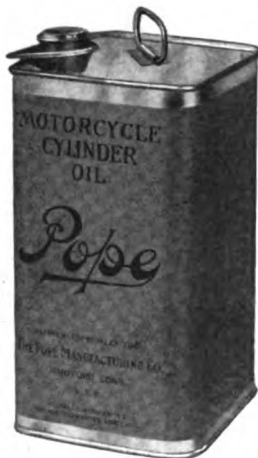
Economical
to Run

The Pope Motorcycle is rapidly forging ahead. Its popularity is advancing by leaps and bounds. There are a large number in use, and all are giving their owners satisfactory service. The Pope Motorcycle has filled a long-felt want and created a distinct field for itself among the great mass of riders. The secret of its success is Quality and Value. It was the first popular-priced machine to make good on the road.

For Touring and all-round use the Pope Motor-

cycle has no superior. It is comfortable to ride, simple to operate, easy to handle and economical to run. The Pope has plenty of power to climb the steepest hills and negotiate the sandiest roads.

The engine starts easily and is remarkably flexible. You can throttle it down so that the machine moves very slowly. Owing to its light weight, a Pope Motorcycle can be managed without taxing a man's strength. It is in a class by itself as regards quality and price.



ALL POPE DEALERS SHOULD CARRY POPE MOTORCYCLE CYLINDER OIL

Refined especially for lubrication of Pope machines
Attractively put up in fancy cans

The best results are always obtained by selecting an oil adapted to the particular motor in which it is to be used. This oil has been selected after exhaustive tests and has been found to meet the requirements of the Pope Motorcycle. Its exclusive use is strongly recommended.

1-Gal. cans for rider's use.

5-Gal. cans for shop use.

The Pope Manufacturing Company, Hartford, Conn.

PACIFIC COAST DISTRIBUTORS

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Northwest

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**Quality
in every thread
Strength
in every fibre**



Style, Neatness and Individuality—
these are the three important characteristics of
AURORA BRAND MOTORCYCLE CLOTHING.
You owe it to yourself and to the great class of riders you
represent, to look your best on a motorcycle. **AURORA**
BRAND Clothing is cool, light in weight, rain, dust and wind-
proof, perfect fitting and complete in workmanship. That's why

AURORA



BRAND

Motorcycle Clothing

is enthusiastically endorsed by clubs and individual riders
throughout the country.

MOTORCYCLE CLOTHING FOR LADIES



For tandem riding, we wish to call attention
to the skirt illustrated here. Not only is it
the ideal tandem skirt, but it can also be used
as a walking skirt. The two divisions of the
skirt are formed in front by a button panel,
thus making it an ordinary walking skirt. For
tandem riding, front panel is unbuttoned on
left side, folded and buttoned down right
side or removed, as desired.

**We also make Motorcycle
and Automobile
Dusters**

Dealers are urged
to write NOW.



Fowler-Carnes Co.
Aurora, Ill.

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New Era Wins Again

ANYWHERE UNDER ANY CONDITION



This Is The Machine That Always Wins

In the 24-Hour Endurance Run held by The North Shore Motorcycle Club, from Chicago to Milwaukee and return twice, the NEW ERA again proved its great endurance and speed by finishing with a higher percentage than any other make of machine entered—there was only one NEW ERA entered, and that one finished 1000% perfect. Everyone concedes this run to have been the most gruelling run held in the Central District this season. Just keep your eyes on the NEW ERA and watch it repeat.

THE NEW ERA AUTO-CYCLE COMPANY

22 Dale Avenue, Dayton, Ohio

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Make a "Has-Been" Of Old Man Loneliness

Get a **Majestic Side-Car** and we guarantee you'll eliminate the word "lonely" from your vocabulary. It will boost your popularity a hundred per cent. with the fair sex.

How many times on your encountering some particularly delightful piece of scenery, have you wished that you had "someone" along to enjoy it with you?

And haven't you felt kind of small and mean when you took out your "boat" for a delightful spin over rolling hills in the bright sunshine and thought of "her" sitting home and waiting for you to come back and tell her what a delightful time you had!

Why not take her with you? Tandem? A tandem is all right, but special clothing is needed and it isn't half as comfortable as a side-car.

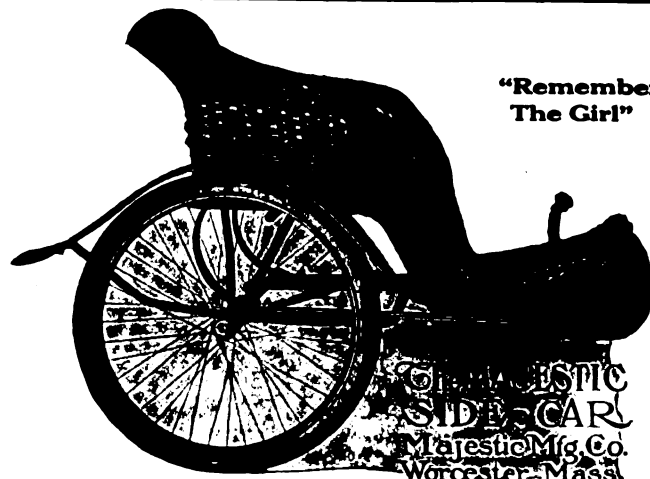
How's this for a Sunday morning programme? 8:30, Hitch up the Side-Car—It takes two minutes;—8:35, "What!—we won't be able to eat all that lunch?" Well, we'll give what's left to the Birds and the Squirrels. Ready? Well, we're off! Off for the Hills and Pastures new in the far-a-way.

IS THIS THE GAME FOR YOU OR ONLY FOR THE OTHER FELLOW?

Specifications

Wheel	26 or 28" as desired.
Tire	First quality Kokomo.
Hub	Turned from bar-steel, small auto-size.
Bearings	Heavy adjustable ball.
Springs	Double leaf, "C" design with clips. No holes in same.
Chassis	Seamless steel tubing, pinned and brazed throughout.
Fittings	Two sets with each Majestic Side-Car, one permanent and one quick detachable.
Fender	Embossed steel, 6½" wide, enamelled, heavily braced.
Body	Large and generous. Plenty of leg room. Made of Genuine Asiatic Reed.

Majestic Mfg. Co.
Worcester, Mass.

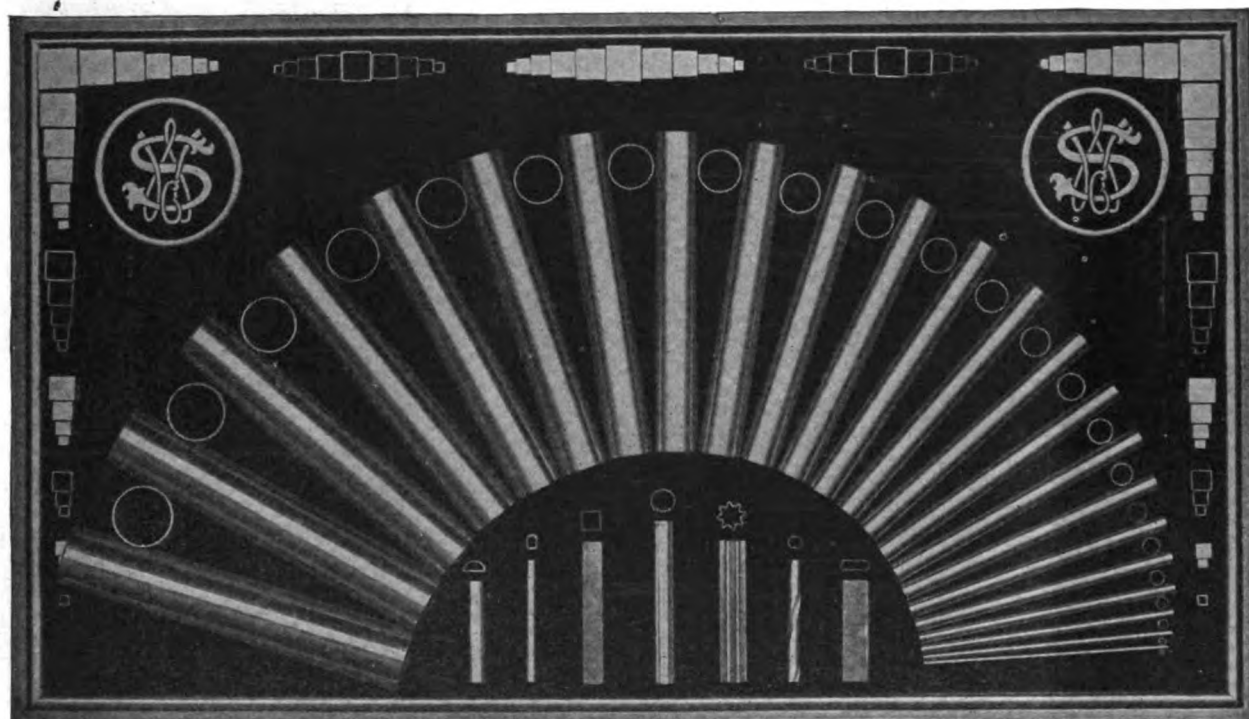


"Remember
The Girl"

PRICE, F. O. B. WORCESTER, \$60.00

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

"STANDAR



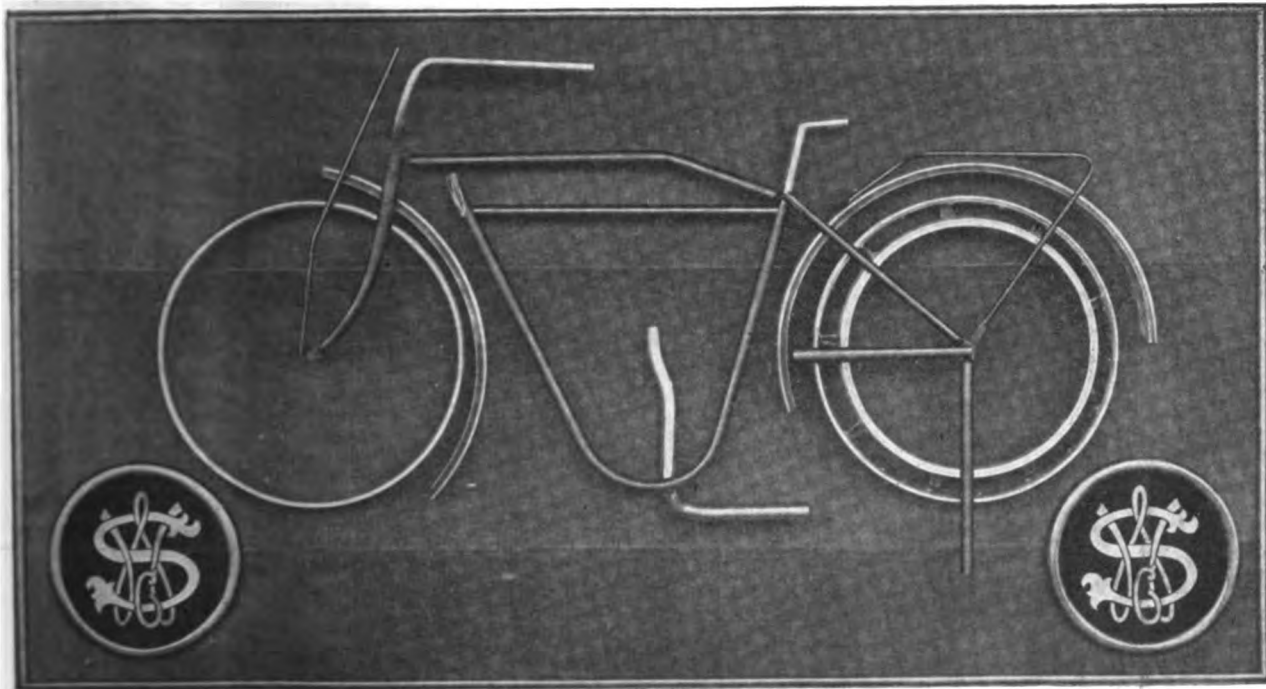
The world's fastest racing motorcycles are made of "Standard" Tubing.

Strength, Resiliency, Beautiful Finish, all the qualities essential for a good frame are found in "Standard" Tubing.

If there was anything better the "Big Fellows" would use it---but it stands alone---nothing can approach it for Bicycle and Motorcycle Frames.

When you buy or repair your machine be sure that the tubular parts are made of "Standard" Tubing, then you'll be sure of the only bone you have in your neck.

D" TUBING



“STANDARD” STEEL RIMS

For Bicycles and Motorcycles

PULLEY RIMS

FRONT FORKS

REAR STAYS

LOOP TUBES

MUD GUARDS

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SEAT POSTS

EXHAUST TUBES

REINFORCED TUBING

THE STANDARD WELDING COMPANY

CLEVELAND

NEW YORK

CHICAGO

DETROIT

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

**WE ARE NOW DELIVERING
THE
“NOJOLT”**



**LOOK FOR IT AT
COLUMBUS
F.A.M. WEEK**

**YOU WILL PRONOUNCE IT SOME BUSS
IT WILL BE WORTH YOUR WHILE**

TRIUMPH MANUFACTURING CO.

51-55 East Woodbridge St.

DETROIT, MICHIGAN

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



ON TO COLUMBUS!

Another Big Manufacturer Equips With United States Tires

The Miami Cycle & Mfg. Company has signed a contract that provides for United States Tire equipment on a large proportion of next year's output of Merkel machines.

These big motorcycle makers, such as the Miami Cycle Co. and the others we have mentioned in previous issues, have chosen United States Tires because of two things.

1st: They have had it demonstrated that there is a demand on the part of riders everywhere for United States Tires, and that in supplying these tires as equipment they add a valuable selling point to their machines.

2nd: They have proven to their own satisfaction that the extra strength and durability which has come from uniting into one tire all the strong points of two famous makes, actually adds strength and durability to their machines.

Riders, you will do well to follow the lead of these prominent makers in making your own tire selection.

Special Notice to Merkel Agents

You can now have your machines equipped with America's **Predominant Tires**. Write the Merkel factory specifying United States Tires and also specify them on your orders.

UNITED STATES TIRE COMPANY
NEW YORK

Vol. 7 JULY 11, 1912 No. 14



MOTORCYCLE ILLUSTRATED

Published every other Thursday at 51 Chambers Street, New York. Home subscriptions, \$1; foreign, \$2. Ten cents a copy.

J. LEO SAUER, President.
H. N. CONDIOT, Secretary.

Entered as second class matter, July 6, 1908, at the Post Office at New York, N. Y., under act of Congress, March 3, 1879.

CIRCULATION THIS ISSUE, 15,000 COPIES.

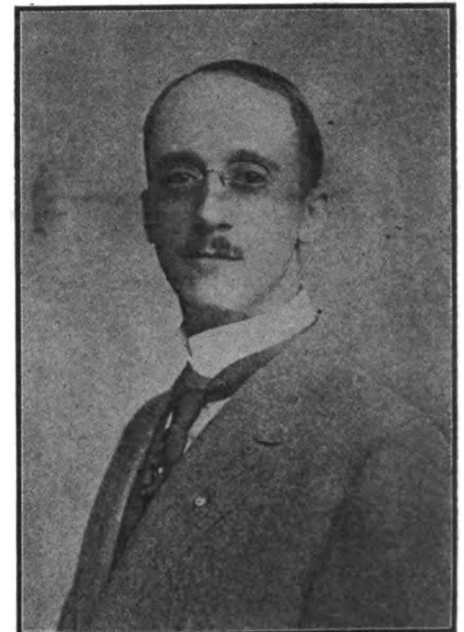
THREE DOCTOR-CANDIDATES FOR THE F. A. M. PRESIDENCY



Dr. J. P. Thornley, of New York.



Dr. B. J. Patterson, Rexford, Kan.



Dr. Clinton La Salle, Rochester, N. Y.

UNLESS all signs fail, the next president of the F. A. M. will be a Doctor, hailing from either New York State or Kansas. There are at this writing three presidential possibilities, and the name of each carries a titular prefix, viz. Dr. J. P. Thornley, of New York City; Dr. B. J. Patterson, of Rexford, Kansas, and Dr. Clinton La Salle, of Rochester, N. Y. The former is chairman of the Committee on Competition, and the latter two are district vice-presidents of the F. A. M. One of the three will undoubtedly succeed President Hamilton, who will not be a candidate for re-election.

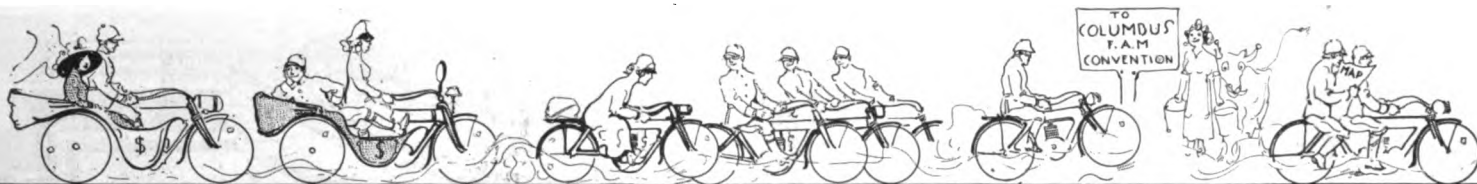
The choice of a president by the delegates to the National Assembly in Columbus next week will intimately involve the appointment of the next

chairman of the Competition Committee. Dr. Thornley has made it plain that he does not want the presidency, and he is a candidate simply to insure re-appointment to his present office. It is safe to say that a majority of the Columbus delegates will be in favor of Thornley's being retained in his present position. When that question has been determined to the satisfaction of Thornley's supporters, the contest for the presidency will in all likelihood simmer down to Patterson and La Salle, both of whom confidently hope to be elected. To attempt to predict which of the two will be successful would be the wildest sort of guesswork, as it is impossible not only to learn the sentiment of the delegates, but even to know how many delegates

will be present, or what States outside of Ohio will be best represented in the convention.

There is no opposition to Secretary-Treasurer Gibson, and he will be elected by acclamation.

In addition to selecting a president, secretary-treasurer and two directors, the assembly will vote upon important amendments to the Constitution and By-Laws and the long-delayed revision of the Rules for Competition. Among the Constitutional amendments is a proposal to abolish the F. A. M. districts and vice-presidencies. Numerous changes are proposed in the Competition Rules, notably a radical one in the present classification of competitors. The sessions promise to be both busy and interesting.



HOW BRITISH RIDERS ARE ORGANIZED



NOW that F. A. M. membership gains are exceeding all past figures and extensions are being contemplated in the system by which the national body seeks to advance the interests of its riders, a consideration of the scope and working methods of the organizations under which English motorcyclists are protected is timely and not without instructive value. Riders in the United Kingdom are listed with either the Auto Cycle Union or the Automobile Association and Motor Union. The first named is the governing motorcycle body. In the latter the members are enabled to reap some of the benefits accruing to automobilists as well as

those interded exclusively for owners of the single-trackers. Primarily the A. A. & M. U. is an automobile body, arrangements having been made only a few months back to include motorcyclists.

The Auto Cycle Union.

The Auto Cycle Union, which has been of vast assistance in the upbuilding of the motorcycle field in the United Kingdom, operates on a broad scale and aims to protect the individual as well as the future of the sport. To begin with, members are supplied with a handbook which gives valuable details relative to Continental traveling and license regulations, and further information may be obtained at any time on application to the A. C. U. headquarters. Under all reasonable conditions legal service is free to members of the body. The governing body not only furnishes referees for sanc-

tioned events, but provides a full set of officials if they are desired. It makes arrangements for triptyques, to be used by riders touring on the Continent, and is of great assistance in obviating unpleasant tangles of red tape at ports and the frontiers of Continental countries. In other words, it strives to keep in touch with its members at all times and to relieve them of every possible discomfort.

Members of the A. C. U. are supplied with identification plates by which their machines may be traced if they are lost in transit or stolen, and the system of locating motorcycles under such conditions has been developed to a highly satisfactory degree. Not long ago the Auto Cycle Union interested itself in a movement to prevent the publication of misleading motorcycle advertisements, and in this way an undesirable trade element was removed. It has co-operated with the Cycle Traders' Union along other lines, and appears to be ever on the alert for an opportunity to assist manufacturers as well as dealers and riders in general.

Scope of the A. A. & M. U.

While the Automobile Association and



G. H. Hamilton, President of the F. A. M.

Motor Union is of much more recent interest as far as motorcyclists are concerned, it holds out a number of inducements not as yet offered by the older body, and as a result about 10,000 of its 45,000 members are riders of the power two-wheeler. One of the most important features is the patrol organization which was taken up when the Automobile Association was formed over five years ago. The system was at first confined to the Brighton Road, but it has since been developed until it covers thousands of miles of main highway, including roads in Scotland. The patrolmen are experienced riders, mounted on motorcycles and bicycles, and it is their duty to cover given routes in order to render practical assistance when an automobilist or motorcyclist gets into difficulty. Not only are the patrol riders called upon to give all kinds of touring information, but they must be capable mechanics and experts in first aid and surgical treatment. If an automobilist or motorcyclist runs short of gasoline at an isolated point, for instance, he has only to wait until a patrol rider appears, when this officer will at once proceed to the nearest supply station and return with the precious fuel. If a tire is blown out or mechanical trouble is encountered the patrolman is obliged to shed his jacket and assist with the repairs. In the event of an accident a road patrolman gives first aid treatment and then superintends the removal of the injured rider to a hospital or other point of safety. In short, a member of the A. A. & M. U. is in a position to call upon the patrols for any reasonable service.

Free Legal Service.

All motorcycle members of the A. A. & M. U. are entitled to the services of the organization's attorneys for alleged offenses under the Motor Car Act, the following violations being among those covered: Driving "to the public danger," failure to produce driving license, driving at night without identification numbers properly illuminated, exceeding the speed limit and failure to comply with technical regulations as to registration, etc. The attorneys representing the organization are selected for their knowledge of the motor laws. In addition to cases coming under the Motor Car Act the attorneys are authorized to serve members in civil actions concerning their motorcycles, up to the point where proceedings are actually instituted. This applies to such matters as third party

claims which are not covered by insurance, disputes in regard to repairs or purchases, etc.

The A. A. also offers an insurance policy which embodies a unique clause. For a comparatively light charge the motorcyclist is insured in such a way that he may apply to the A. A. executive committee for a final settlement of his claims in the event of a dispute with the underwriters. This guarantees satisfaction for the rider, as the A. A. is obligated to stand with him until his case is settled.

Extensive Hotel System.

The A. A. & M. U. hotel system extends throughout England, Wales and Scotland. The hotels are selected and passed upon by a special committee, and before they are given the stamp of approval it is understood between the proprietors and the organization officials that A. A. & M. U. members are to receive special consideration. In the entrance hall of each approved hotel is a bulletin board in the center of which is a locked cabinet containing road information, supplied by members, agents, hotel proprietors and patrols, to each of whom a key is given. The bulletin board is thus made a practical means of communicating road information to members, and it may also be utilized for messages. A party riding out early in the day, for instance, may leave a note at a specified bulletin cabinet so that friends who follow later may be instructed as to a meeting place and given other personal directions. The value of this system is obvious, and it has proved one of the most attractive features of the organization's work.



E. M. ESTABROOK,
Chairman F. A. M. Membership Committee.

Registered Agents.

A. A. & M. U. agents are supplied with signs and credentials similar to those provided by the F. A. M. in this country, but the service

system is carried into more detail on the other side. In addition to giving members of the organization special attention, each agent has his establishment in direct touch with a central department so that help may be summoned promptly in case of an accident or when repairs are needed for which the agent in question has no facilities. Members who tour abroad with their motorcycles can obtain from the association a customs card which obviates the necessity for depositing duty at the various frontiers. In addition to this the A. A. hotel system has been extended to



HOWARD FRENCH,
F. A. M. Director.

France, and it will be carried into other continental countries, to provide for the A. A. tourist after he has left home soil. The association has also been authorized to issue international driving permits and car permits to avoid the necessity for obtaining foreign licenses.

How Funds Are Spent.

The handbook issued annually to A. A. & M. U. riders contains full information concerning the location of patrols, a list of agents with particulars as to their repairing facilities, etc., a list of officially appointed hotels, foreign touring information and routes and a legal section devoted to a summary of the law as affecting motorists.

The funds received by the A. A. & M. U. through the subscriptions of members go to defray the cost of erecting sign posts and



F. I. WILLIS,
F. A. M. Director.

warning boards, improving dangerous corners and roads in general. The money is also expended in contests to prevent the passage of unreasonable local speed regulations, to safeguard the interests of motorists in Parliament to discourage dangerous driving by both automobilists and motorcyclists, to agitate for better lighting of all vehicles on public roads and to work for proper limitation of taxation on motor vehicles throughout the United Kingdom.

ON THE AFFILIATED LIST.

THE following clubs have recently joined the Federation ranks: Covington (Ohio) Motorcycle Club, G. E. Drees, secretary, 15 members, 100 per cent.; Emporia (Kansas) Motorcycle Club, D. R. Kerr, secretary, 709 Commercial street, 15 members; Yale Motorcycle Club, Toledo (Ohio), I. W. Schroeder, secretary, 246 Wasaon street, 25 members; Pottstown (Pa.) Motorcycle Club, G. E. Freshley, secretary, 119 High street, 17 members; Smith County Motorcycle Club, Smith Center (Kansas), Seth Myers, secretary, 14 members; La Crosse (Wis.) Motorcycle Club, Ted Schultz, secretary, 1325 Jackson street, 20 members, 100 per cent.

CLUB ORGANIZERS.

AMONG those starting new clubs this week are: H. F. Farnsworth, 500 Prindle street, Chehalis, Wash.; W. H. Powell, Sodus, N. Y.; F. M. Turner, Union City, Ind., and J. M. Chapman, Charlotte, N. C.

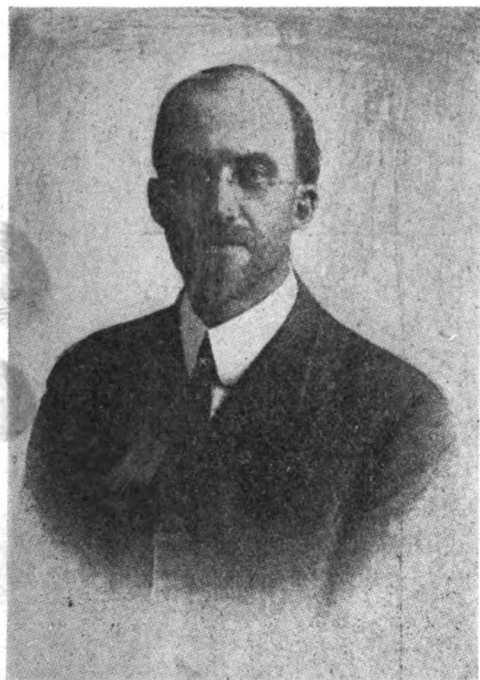
OUT of sixteen clubs affiliating with the Federation in the month of June, fourteen were 100 per cent. squads.



F.A.M. ORGANIZATION POINTERS

GOVERNMENT OF THREE SIMILAR ORGANIZATIONS

THE Automobile Club of America has a limited membership and is regulated by a Board of Governors as mentioned below. Its objects are: to promote a social organization or club, composed in whole or part of owners of self-propelled pleasure vehicles; to afford a means of recording the experiences of members and others using automobiles and to promote original investigation in the develop-



Secretary-Treasurer Gibson.

ment of automobiles, etc. The organization co-operates in securing rational motor vehicle legislation, and protects the interests of owners and users against unjust or unreasonable legislation and maintains the lawful rights and privileges of owners and users of all forms of self-propelled vehicles, whenever and wherever such are menaced. A prime object is in the encouragement and development of the automobile and like means of propulsion (fly-

ing machines, motor boats, etc.) and mechanisms incidental to the same. The promotion and encouragement of road construction and maintenance, as well as the improvement of existing highways is also provided for.

The officials consist of a president, three vice-presidents, a secretary and a treasurer. The Board of Governors has 12 members, of which the president and vice-presidents with the treasurer are members. For their assistance the following committees are formed: Executive, Auditing, Legal, Bureau of Tours, Highways, Technical, with others incidental to the maintenance of a club only. The Executive Committee (president, first vice-president and three other board members) acts for the club in all matters affecting its interests, instructs and authorizes any officials or members or any committees appointed by it to represent it and to carry out its policies. It makes rules for the government of the club, elects officials and fills vacancies on the Board of Governors. It fixes or remits penalties, and enforces any penalties inflicted. Its further duties are such as would be fulfilled by a board of directors of a corporation or like body.

The Auditing Committee performs general auditing of the club's accounts, including those of the other committees. The Bureau of Tours has maps prepared, provides for the acquiring of American and foreign touring information and the distribution thereof to members; erects sign-posts, etc. The Legal Committee attends to all legislative matters as are mentioned above. The Technical Committee encourages the development of automobiles, engines and allied mechanisms as stated above, and having a laboratory embodying a testing apparatus, is a potent factor in this direction. Representatives can be furnished from this committee for the settlement of disputed questions on economy contests and tests of horsepower, speed, etc. New ideas are encouraged, if of worth, and this branch has proved itself most valuable to the development of the industry since the formation of the club. The committee is an acknowledged authority on such matters, and is appealed to frequently.

The questions pertaining to highways are taken care of by the highways officials. From the other committees, officials for contests of various natures have been assigned in the past. The Board of Governors has a representative in each committee; thus the third vice-president is a member of the Bureau of Tours, etc. These board members are generally the chairmen of their respective com-

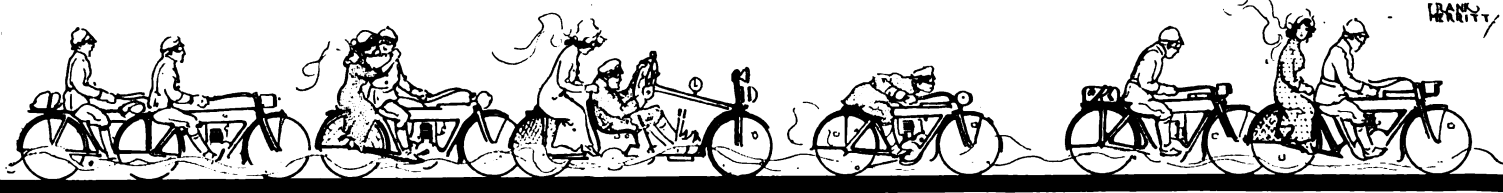


J. W. THOMPSON,
Vice-president Southern District.

mittees. The Bureau of Tours has membership outside of the regular club membership and additional thereto, but is under the club's control as stated.

American Automobile Association.

The American Automobile Association is formed of a number of State associations under the governance of a national body, and





has a representative form of government. The association proper has a national headquarters at which are located the officers of the various boards and committees. In addition to the State associations, clubs can affiliate with the association and have representation as mentioned below. The objects of the association are to secure rational legislation for automobiles, to form proper rules governing their use, to protect the interests of users against unjust discrimination and maintain their lawful rights and privileges, to encourage the use and development of the automobile and to promote the "Good Roads" movement. To this end a board of directors is the governing body, with the following boards and committees: Executive, Good Roads Board, Touring Board, Legislative Board and Contest Board.

The Board of Directors is made up of representatives from the State associations and affiliated clubs, one to each club or association. From the board are appointed the chairmen and members of the boards or committees and the officials, which are: President, three vice-presidents, chairman executive committee, treasurer and secretary. As in the Automobile Club of America, the president



J. B. COBLENS,
Vice-president Gulf District.

and vice-presidents are often chairmen of various boards. All officials, however, are elected annually, and are not necessarily more than members of the various boards. The Executive Committee has the same powers as that of the same committee of the A. C. A. The same is true of the Board of Directors as compared with the Board of Governors.

The Good Roads Board promotes the "Good Roads" movement, in the encouragement of road construction and maintenance and in the improvement of existing roads. As each State association and affiliated club is modeled upon the lines of the parent body, each will have (local) officials, heads of boards, etc., consequently the Good Roads Board consists of representatives of the local Good Roads Board, one from each State association and affiliated club. The Touring Board has its association chairman, and is made up of representatives of local touring boards. It has general charge of all tours conducted by the



EARLE L. OVINGTON,
Director of the F. A. M.

association, of the gathering and collecting of touring information, etc. The national board receives reports from the local boards and issues sanctions for contests. There is one member from each club or State association on the national Touring Board. The association has European representatives who are members of this Touring Board and under the governance thereof.



B. A. SWENSON,
F. A. M. Commissioner for Providence.

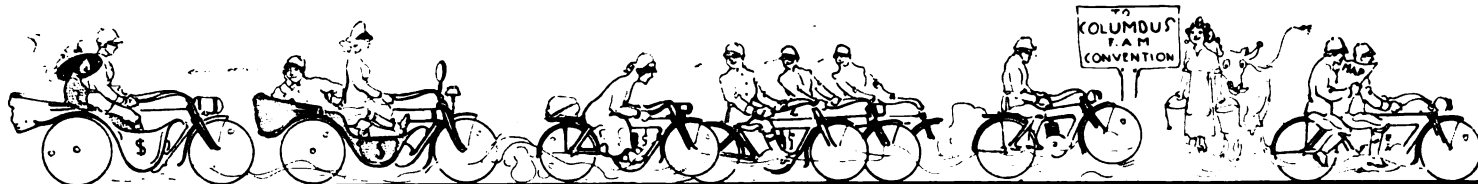
The Legislative Board corresponds to the Legal Committee of the A. C. A. It is made up of State Association and affiliated club representatives as on other boards, with an official as chairman. The Contest Board is appointed in its officials by the Board of Directors and has associate members, usually one from each State. It consists of a chairman and four board members; and advisory committee and a technical committee. The technical committee has functions somewhat similar to the corresponding body in the A. C. A. The Contest Board issues sanctions, the chairman doing this in person after consideration by the members. The duties of the advisory committee members are various: such as with regard to legalities of meets, races, contests, etc. Officials for such events are furnished (referees, judges, etc.), and a member of the board is supposed to be present at all meets, etc., held under the association's sanctions.



C. H. LANG,
F. A. M. Commissioner for Illinois.

League of American Wheelmen.

Upon the skeleton of this body, modern motor organization regulations have been based. The league, better known as the L. A. W. was "an association established to promote and facilitate the sport of bicycling, to protect members in their rights and to secure better laws for the construction of highways." The officers were: president, vice-president, secretary-treasurer, one chief consul from each State, and one representative per State for every 50 members therein. These formed a board of officers, of which eight formed a quorum. Each State in which there were 25 members or over formed a State division, the code of by-laws being in keeping with the constitution of the L. A. W. An executive board, consisting of the chief consuls and representative and the secretary treasurer, was in command. Only amateurs were eligible to membership.



HOW F. A. M. BOOSTERS EARNED REWARDS

Every Member Who Brought in Five Recruits Will Receive a Federation Emblem From Secretary Gibson—

F. J. Herman, of Pueblo, Heads List With Seventy-Four New Applications.

THAT F. A. M. members, as individuals, have been working consistently for the upbuilding of their organization during the last year is indicated by the list printed



G. EUGENE LAIN,
F. A. M. Commissioner for New Mexico.

below of those who have brought at least five recruits under the banner. Early in the fiscal year which has just closed Secretary Gibson announced that each Federation worker who turned in the membership applications of five riders would be entitled to an F. A. M. novelty, and accordingly only those who qualified for rewards are included in the list which follows:

Outside the States.

Alan L. C. Ross, Vancouver, B. C., 26; Theodore Siddall, Manila, P. I., 16; T. H. Smallwood, Culebra, Canal Zone, Panama, 5.

Massachusetts.

Kenard C. Bryan, Lynn, 5; A. B. Maddison, Lynn, 7; C. I. Page, Greenfield, 7; W. E. Wiswell, Lynn, 8; Earl Gove, Brockton, 12; A. C. V. Kennedy, Boston, 14; James Dunham, Middleboro, 16; W. F. Mann, Boston, 19; Leon W. Ludden, Brookville, 21; G. A. Gove, Brockton, 25; Charles H. Obrist, Attleboro, 28.

Rhode Island.

B. A. Swenson, Providence, 28; Hiram G. Baxter, Providence, 5.

Connecticut.

F. R. Wilson, Norwich, 23; A. H. Harrop, New Britain, 7; C. R. Wilson, Norwich, 5.

New York.

Gus Rotholz, New York City, 5; Dr. C. W. La Salle, Rochester, 5; R. E. Jewell, Binghamton, 5; Raymond Elmendorfer, Lockport, 5; G. W. Fenner, Syracuse, 6; J. A. Ochs, Rochester, 6; W. F. Smith, Lockport, 6; F. W. Anderson, Albany, 6; E. Sirowatka, Binghamton, 6; J. J. Weiler, Utica, 7; G. M. Trefts, Jr., Buffalo, 7; George Stinson, Lockport, 7; M. D. MacDonald, Buffalo, 7; William J. Coleman, Niagara Falls, 7; John U. Constant, Brooklyn, 8; E. J. Emmendorfer, Lockport, 8; H. George Hammond, Jr., Rochester, 8; Edward Roth, Lockport, 9; Arthur Holly, Elmira, 9; W. H. Leikheim, Albany, 11; Clarence Gridley, Cortland, 12; Frank Martin, Ithaca, 13; Harry W. English, Poughkeepsie, 14; C. C. Cooper, Homer, 14; Lee Kingdon, Batavia, 15; R. G. Hanna, Brooklyn, 17; F. H. Van Duzer, Port Richmond, 20; S. F. Houseknecht, Batavia, 22; W. J. Ferris, Lockport, 24.



H. E. BALDWIN,
F. A. M. Commissioner for Wisconsin.

New Jersey.

John Steele, Paterson, 5; Harry T. Post, Bloomdale, 5; William F. Ash, Atlantic City, 5; William Heckenhorn, Camden, 6; A. L. Hillaman, Camden, 6; A. E. Greenwood, Atlantic City, 6; Ralph Auerbach, Plainfield, 8; E. Ellsworth, Red Bank, 10; William N. E. Shannon, Atlantic City, 11; Jack Horner, Plainfield, 16; William H. James, Newark, 16; E. J. Kenner, Somerville, 18; William H. Haelig, Jr., Bound Brook, 21.

Pennsylvania.

E. J. Gallagher, Erie, 5; G. J. Hepler, Pittsburgh, 5; James Mayo, Reading, 5; Max Meis, Reading, 5; H. L. Neff, Allegheny, 5; William G. Schaeffer, Reading, 5; A. G. Schmidt, Sharpesburg, 8; G. F.

Hewitt, Harrisburg, 9; Julius Kline, Philadelphia, 9; P. S. Coulter, Homestead, 9; J. G. Nuebling, Reading, 11; Alexander Klein, Philadelphia, 12; William Demler, Bradford, 13; L. J. Spingler, Philadelphia, 15; Harvey R. Williams, Lancaster, 15; E. R. Connell, Pittsburgh, 20; Rudolph Baerle, Philadelphia, 21; Charles H. Lejeal, Erie, 27.

Maryland.

J. A. Robison, Baltimore, 6; John N. Carroll, Baltimore, 9; H. Elmer Snyder, Baltimore, 10; William Wood, Baltimore, 20.

West Virginia.

V. B. Carter, Huntington, W. Va., 6.

Washington, D. C.

M. E. Mangold, 13; George C. Billard, 15; Thomas O. Wansleben, 35.

Ohio.

H. R. Kitchen, Fremont, 5; F. A. Copley, Fostoria, 5; N. L. Schneider, Massillon, 5; E. L. Moore, Piqua, 5; C. H. Marsh, Newark, 5; J. F. Merkel, Middletown, 5; H. J. Tucker, Cleveland, 5; H. A. Taubensee, Canton, 5; E. Huntzinger, Piqua, 5; Blaine Johnson, Marietta, 5; Hart A. Dickason, Elyria, 5; E. W. Lape, Piqua, 6; S. H. Kinsey, Fremont, 6; F. E. Raymond, Lorain, 6; Harry George, Canton, 6; E. H. Tracy, Cleveland, 6; H. H. Snyder, Columbus, 7; W. H. Snyder, Columbus, 8; George T. Stream, Newark, 8; C. H. Hiller, Lorain, 9; Cecil Calvert, Portsmouth, 10; Chas. F. Williams, Mansfield, 12; J. A. Campbell, Dayton, 16; Paul Monroe, Sidney, 16; H. D. Capron, Toledo, 17; R. J. Walker, Bowling Green, 17; C. O. Lister, Mansfield, 18; Tide Davenport, Portsmouth, 19; F. Hays Crumb, Galion, 20; G. I. Stine, Fremont, 23; C. Rossiter, Norwood, 29; R. S. McConnell, Cleveland, 29; I. F. Jacobs, Dayton, 70.

Indiana.

O. Ray Stanfield, Kokomo, 5; Paul Hegner, Marion, 5; Walter Corr, Hobart, 5; Erick Carlson, Hobart, 5; Austin Holmes, Fulton, 6; P. H. Makielski, South Bend, 6; Mike Schaeffer, Evansville, 6; Roy Y. Sonneborn, La Porte, 6; R. N. Hart, Marion, 7; Pat McMahan, Fulton, 7; Robert H. Sturm, Indianapolis, 8; H. R. Middlebrook, Gary, 8; J. E. McCurdy, La Porte, 11; Earl S. Sult, Muncie, 12; W. O. Feudner,



M. E. BOWER,
F. A. M. Commissioner for Idaho.



JOE D. HANNA,
F. A. M. Commissioner for Florida.

Rushville, 12; Elmer S. Smith, Richmond, 13; W. R. Weber, Gothen, 17; Thomas Bouchie, Vincennes, 17; Thurman Constable, Union City, 17; R. C. Kirk, Muncie, 18; A. C. Aichele, Ft. Wayne, 20; Harry Graff, Indianapolis, 35; A. H. Schnell, Evansville, 36.

Illinois.

Joseph Blankenheim, Chicago, 5; C. R. Schwarz, Chicago, 5; Thomas Daley, Chicago, 5; F. MacSchellinger, Harvard, 6; Dr. James MacCoy, Joliet, 6; William Voss, Peoria, 6; H. F. Stoll, Joliet, 7; William Murray, S. Chicago, 7; J. Handen, Chicago, 8; Clarence Carratt, Rockford, 8; F. E. Cunningham, Chenoa, 8; J. H. McCrea, Springfield, 9; A. R. Myrick, Jacksonville, 9; Perrin B. Whitney, Chicago, 10; Jake Petaka, Chicago, 11; Ben Koch, Rock Island, 11; William M. Johnson, Chicago, 12; Walter Henry, Chicago, 13; E. E. Herman, Waukegan, 15; R. T. Harney, Chicago, 16; Chas. A. Wellman, Chicago, 17; Ed. Kellington, Decatur, 19; F. E. Dittus, Chicago, 19; A. L. Johnson, Rockford, 22; George Reese, Aurora, 26.

Missouri.

J. Hurck, St. Louis, 5; Geo. H. Schmitt, St. Louis, 7; D. A. Moses, Kansas City, 10; G. W. Duncan, St. Louis, 11; C. B. Cornwell, St. Louis, 21; R. G. Holmes, St. Louis, 28.

Wisconsin.

H. A. Shiels, Fond Du Lac, 6; E. W. Shannon, Appleton, 7; H. H. McDaniel, Janesville, 8; Myron Rogers, Madison, 11; Henry Langenbach, Kenosha, 11; F. W. Huels, Madison, 12; C. A. Carpenter, Milwaukee, 16; C. D. Bremer, Milwaukee, 19.

Michigan.

J. B. Swegles, Pontiac, 5; William Clemence, Detroit, 6; Walter F. Sheets, Detroit, 7; B. S. Gochebauer, Pontiac, 8; C. H. Drude, Detroit, 12; R. O. Chipman, Grand Rapids, 42.

South Carolina.

P. L. Greenough, Charleston, 8; K. W. Hollingsworth, Columbia, 11.

Tennessee.

H. Richmond, Memphis, 5; H. E. Atwood, Memphis, 23.

Georgia.

Otto Kolb, Savannah, 5; John Miller, Atlanta, 8; W. E. Page, Columbus, 18.



R. D. BERNARD,
F. A. M. Commissioner for Montana.



G. H. BANGHAM,
Chairman of Arrangements Committee for the
Columbus Meet.



ALBERT J. WOOLLEY,
F. A. M. Commissioner for South Dakota.

Florida.

Walter Jenkins, Miami, 7; J. D. Hanna, Tampa, 11; D. S. McGraw, Jacksonville, 17.

Alabama.

D. W. Morrison, Montgomery, 5; W. D. Gresham, Birmingham, 6; E. S. Egge, Montgomery, 15; Valdemar Jensen, New Orleans, La., 12.

Texas.

C. L. Huser, San Antonio, 7; A. Grimm, San Antonio, 13; Arthur Mitchell, Dallas, 15; E. H. Frank, Galveston, 17; Fred Luther, Ft. Worth, 17; C. I. Mitchell, Temple, 19; J. A. Olinger, Enid, Okla., 12.

California.

C. H. Clem, Redlands, 5; George Laughead, Stockton, 5; J. J. O'Keefe, Modesto, 5; R. E. Partlow, San Jose, 5; M. E. Dalldorf, San Bernardino, 5; E. S. LaPierre, Oakland, 6; A. Gergishak, San Francisco, 6; Arthur Tateoson, Fresno, 6; I. W. Story, Oakland, 6; William B. Schortman, Porterville, 7; Harry Askow, Berkeley, 10; R. P. Moliter, Santa Cruz, 11; O. H. Fisher, Napa, 12; E. A. Shoemaker, Sacramento, 13; M. R. Homan, Jr., Hanford, 14; W. M. Smith, Whittier, 15; E. F. Rose, Oakland, 15; R. Y. Leslie, Pasadena, 16; A. W. Green, Vallejo, 16; J. E. Farris, Turlock, 16; Charles R. Fox, Lemoore, 17; E. B. Ellis, Berkeley, 17; W. W. Hatton, Bakersfield, 19; Thomas B. Haines, Maricopa, 20; J. R. Mellander, Watsonville, 20; P. E. Marlatt, Santa Rosa, 22; D. R. Rutherford, Vallejo, 24; D. F. Lightner, Bakersfield, 32; E. A. Holdridge, Modesto, 35; William Fowler, Salt Lake City, Utah, 9.

Colorado.

Howard Williams, Boulder, 5; George P. Bartlett, Colorado Springs, 8; L. R. Miller, Denver, 14; Leo A. Woods, Greeley, 20; F. J. Herman, Pueblo, 74.

Minnesota.

Eugene Scharenbroich, St. Cloud, 6; David Nahinsky, St. Paul, 10; E. H. Hammer, Minneapolis, 21; I. W. Stewart, St. Paul, 36; W. W. Waddell, Aberdeen, S. D., 9.

Nebraska.

Charles H. Gabus, South Auburn, 10; C. N. Noah, Omaha, 13; S. F. Boord, Omaha, 12.

(Continued on page 66.)





OHIO SETS PACE IN F. A. M. MEMBERSHIP

Buckeye State Has Nearly 1,500 Federation Riders, with New York, Illinois and California Trailing Closely—
Last Number Issued by Secretary Gibson in June Was 16,250.

HAVING 1,459 members in good standing on July 1, Ohio leads all other States in F. A. M. representation, according to a complete schedule of State memberships just prepared by National Secretary Gibson. New York is in second place with 1,356 members, Illinois has 1,138 Federation riders and California has a squad of 1,023 affiliated riders. Below the thousand mark Pennsylvania ranks highest, with 826 members; Indiana has 735 and Massachusetts 518. Secretary Gibson's full list, divided as to club and unattached riders, is as follows:

Maine—affiliated, 1; unaffiliated, 5; total, 6. New Hampshire—affiliated, 14; unaffiliated, 18; total, 32. Vermont—unaffiliated, 1. Massachusetts—affiliated, 358; unaffiliated, 160; total, 518. Rhode Island—affiliated, 106; unaffiliated, 12; total, 118. Connecticut—affiliated, 88; unaffiliated, 73; total, 161. New York—affiliated, 963; unaffiliated, 393; total, 1,356. New Jersey—affiliated, 333; unaffiliated, 79; total, 412. Pennsylvania—affiliated, 526; unaffiliated, 300; total, 826. Maryland—affiliated, 155; unaffiliated, 21; total, 176. Virginia—affiliated, 47; unaffiliated, 9; total, 56. West Virginia—affiliated, 39; unaffiliated, 15; total, 54. Delaware—unaffiliated, 3. District of Columbia—affiliated, 83; unaffiliated, 11; total, 94. Ohio—affiliated, 1,151; unaffiliated, 308; total, 1,459. Indiana—affiliated, 548; unaffiliated, 187; total, 735. Illinois—affiliated, 848; unaffiliated, 290; total, 1,138. Missouri—affiliated, 161; unaffiliated, 31; total, 192. Wisconsin—affiliated, 190; unaffiliated, 113; total, 303. Michigan—affiliated, 178; unaffiliated, 61; total, 239. North Carolina—unaffiliated, 9. South Carolina—affiliated, 17; unaffiliated, 19; total, 36. Tennessee—affiliated, 38; unaffiliated, 19; total, 57. Georgia—affiliated, 138; unaffiliated, 25; total, 136. Florida—affiliated, 162; unaffiliated, 41; total, 203. Alabama—affiliated, 62; unaffiliated, 21; total, 83. Arkansas—affiliated, 16; unaffiliated, 9; total, 25. Louisiana—affiliated, 43; unaffiliated, 3; total, 46. Texas—affiliated, 213; unaffiliated, 15; total, 228. Kentucky—affiliated, 32; unaffiliated, 21; total, 53. Mississippi—affiliated, 2; unaffiliated, 7; total, 9. Oklahoma—affiliated, 28; unaffiliated, 9; total, 37. California—affiliated, 874; unaffiliated, 149; total, 1,023. Nevada—affiliated, 1; unaffiliated, 1. Utah—affiliated, 1; unaffiliated, 25; total, 26. Colorado—affiliated, 265; unaffiliated, 40; total, 305. New Mexico—unaffiliated, 9. Arizona—affiliated, 14; unaffiliated, 10; total, 24. Minnesota—affiliated, 105; unaffiliated, 34; total, 139. North Dakota—unaffiliated, 7. South Dakota—affiliated, 11; unaffiliated, 28; total, 39. Nebraska—affiliated, 100; unaffiliated, 18; to-

tal, 118. Kansas—affiliated, 361; unaffiliated, 28; total, 389. Iowa—affiliated, 189; unaffiliated, 58; total, 247. Wyoming—affiliated, 3; unaffiliated, 6. Montana—affiliated, 38; unaffiliated, 18; total, 50. Idaho—affiliated, 27. Oregon—affiliated, 78; unaffiliated, 15; total, 93. Washington—affiliated, 267; unaffiliated, 27; total, 294. Philippine Islands—affiliated, 16; unaffiliated, 2; total, 18. Panama—affiliated, 17; unaffiliated, 3; total, 20. Canada—affiliated, 61; unaffiliated, 11; total, 72. Mexico—unaffiliated, 1. England—unaffiliated, 1.

F. A. M. GROWTH IN JUNE.

F. A. M. statistics for June are as follows: New members by districts—New England, affiliated, 12; unaffiliated, 16; renewals, 12; Atlantic, affiliated, 121; unaffiliated, 23; renewals, 85; Peninsular, affiliated, 61; unaffiliated, 6; renewals, 5; Lake, affiliated, 319; unaffiliated, 94; renewals, 165; Gulf, affiliated, 23; unaffiliated, 3; renewals, 5; Central, affiliated, 54; unaffiliated, 13; renewals, 23; South Western, affiliated, 54; unaffiliated, 20; renewals, 42; Pacific, affiliated, 38; unaffiliated, 1; renewals, 3; Canada, unaffiliated, 1; total of new members, 899.

The new members for June by States are: New Hampshire, 4; Massachusetts, 19; Rhode Island, 5; New York, 49; New Jersey, 18; Pennsylvania, 80; Maryland, 14; District of Columbia, 13; West Virginia, 9; Virginia, 1; North Carolina, 1; South Carolina, 22; Georgia, 4; Florida, 3; Alabama, 35; Tennessee, 2; Texas, 23; Kentucky, 1; Louisiana, 1; Arkansas, 1; Ohio, 148; Indiana, 66; Illinois, 124; Michigan, 16; Wisconsin, 48; Missouri, 11; South Dakota, 2; North Dakota, 1; Kansas, 56; Iowa, 8; Nebraska, 2; Minnesota, 8; California, 65; Colorado, 3; New Mexico, 4; Arizona, 2; Washington, 26; Oregon, 7; Montana, 6; Canada, 1.

NEW IN THE RANKS.

IN considering the full line-up of Federation clubs do not overlook these, fresh from the hands of their organizers: Santa Rosa (Cal.) M. C., H. C. Bremer, secretary, twenty-two members; Carbondale (Pa.) M. C., R. G. Moon, secretary, fifteen members; Coffeyville (Kan.) M. C., Fred Scothorn, secretary, eighteen members; Goshen (Ind.) M. C., W. R. Weber, secretary, eighteen members; Blair County M. C., Altoona, Pa., T. M. Sheedy, secretary, twelve members. Each of these clubs brought in its members on a 100 per cent. basis.

F. A. O. Johnston, president of the Toronto M. C., is also chairman of its contest board.



JESSE CAMPBELL,
Formerly Ohio State Commissioner and Now
Lake District Vice-President.

ANOTHER \$25 CHECK.

THE N. B. HARRIS Detective Agency, in Los Angeles, Cal., has just received a \$25 check from Secretary Gibson, in keeping with the provision which sets aside a reward of this amount for the recovery of a motorcycle stolen from a Federation member. On December 31 a machine belonging to Paul J. C. Derkum was stolen in Los Angeles and the case was placed in the hands of the detective agency. In February two arrests were made and the motorcycle was recovered.

A ROAD PRECEDENT.

ELWOOD, Ind.—Walter Evans, an Elwood motorcyclist, was fined \$10 and costs by a Fairmount justice of the peace, for failure to give half the road to a farmer whom he met on the Fairmount-Alexandria pike. Evans was on his way to the Fairmount race tracks and was carrying Duke Humphries, another Elwood boy, on his handlebars. When he met the farmer, he found it difficult to turn out of the beaten path, and accordingly forced the rig out of path, and the horse turned around so quickly that the buggy was overturned. Evans and Humphries stopped and gave all the assistance possible.

LAMP WINNERS FOR JUNE.

IN the club contest for Old Sol lamps donated by the Hawthorne Mfg. Co., the winners for June are as follows: Indian Motorcycle Club, Mobile, Ala.; 28 members, two lamps; East Side Motorcycle Club, East St. Louis, Ill.; 28 members, two lamps; Austin Motorcycle Club, Chicago, Ill.; 24 members, one lamp; West Texas Motorcycle Club, Stamford, Texas; 23 members, one lamp.

TWO CLUB PRIZES.

THE members of the West Texas M. C. made a big push to get among the winners of Old Sol lamps for June and rather than deny them the fruits of their effort, Chairman Estabrook has decided to add two more lamps to the winnings for that month, thus satisfying the two clubs tied for first place.

WHAT with the four lamps given to clubs taking part in the National Tours and with three lamps given to clubs in the Short Grass Tour and the fourteen lamps awarded as above, the F. A. M. is certainly showing a disposition to help those who help themselves.

REGISTERED SHOPS.

THE following repairers have taken out certificates of registration with the F. A. M.: Kumler Bros., 1769 East Fifty-fifth street, Cleveland, Ohio; Arnold Motor Co., 211 Sixth street, Logansport, Ind.; Coffeyville Machine & Motorcycle Repair Co., 216 East Tenth street, Coffeyville, Kan.; N. P. Rosvall, Esbon, Kan. Information relative to registration of repair shops with the F. A. M. will be sent upon request. Inquiries should be addressed to E. M. Estabrook, Bangor, Me.

A CORRECTION.

IN an outline of a proposed amendment to Article 5, Section 4 of the F. A. M. constitution, referring to the election of the president and the secretary-treasurer, it was inadvertently stated in the June 27 issue of *MOTORCYCLE ILLUSTRATED* that the revision would provide for the election of these officials by a "majority vote of the total number of directors present." It was the intention to refer to the vote of the *delegates* present, not the directors.

COLUMBUS TOURISTS.

J. E. JACKSON, of Tampa, Fla., left there on July 4 for Columbus on his Yale, and will call for his F. A. M. card, pin, etc. when he reaches Atlanta, Ga.

READY FOR THE GUN

National Tourists Are at the Tape Prepared for the Movement to Convention City.

WITH the end of this week comes the beginning of the 1912 F. A. M. tours and the meet at Columbus. Albany, N. Y., sends the first of the two-wheelers into the field, the Albany tour starting Sunday morning with F. S. Ellett, of Elmira, as tourmaster. It is believed that at least 800 riders will be in line when the four tours join in Columbus next Wednesday morning. The tours have been thoroughly advertised, and the entries have been large. Last Saturday Tourmaster Baker, of the Louisville, or Southwestern Tour, had thirty-five entries. Tourmaster Campbell had forty-two, and Ellett, of Elmira, had about thirty. During the present week each tourmaster has received additional entries.

The gold and blue sweaters and caps, provided for the tourmasters, have been forwarded to them, and the caps for the lieutenants have been sent to the four road officials for distribution. The arm-bands which are to be given to each rider are ready, and the gold medals, to be awarded to each tourist who completes his tour, will be ready for distribution at Columbus. They are heavily plated, bearing a bas-relief of a motorcycle and a blue enamel plate on the face. In the enamel are the words "F. A. M. Tours," surrounding a miniature motor. On the reverse of the medal is the inscription "Awarded by the Federation of American Motorcyclists, 1912 National Tours, Columbus, O., July 17-21."

Samples of the medals were received last week by Fred I. Willis, of the F. A. M. press committee, and Guernsey Van Riper, tour secretary. They were approved by President Hamilton, who was in Indianapolis, where he met with Chairman Willis and Secretary Van Riper to discuss the final details of the tours.

"The 1912 tours have been thoroughly advertised," said President Hamilton, "and every F. A. M. member has been personally urged to join the tours and attend the Columbus meet. We have every reason to believe that the attendance at Columbus will break all records, and that the tours will attract more riders than ever before in our history.

"I hope each tourmaster will enforce all

the rules rigidly—and I am sure they will. We want the tours to be pleasure rides—not a hardship. The schedules are easy, and if they are lived up to each rider should come into Columbus as fresh and full of vim as when he started. I urge every rider to observe carefully the rule which prohibits the use of the open muffler in all towns and cities, and I hope each rider will pay particular attention to his personal appearance, as well as the appearance of his machine. A stop should be made just before entering towns of considerable size, and every rider should spruce up. The people in the cities and towns know the riders are coming, and it is the duty of all riders to make the best possible impression. This I am confident they will do."

A change was necessary in the Baltimore tour, and the route was thrown through Pittsburgh, with the first night stop at Bedford Springs instead of Cumberland. The second night will be spent at Pittsburgh, instead of at Wheeling. The Albany tour is also changed slightly. Instead of running from Cleveland to Newark, as had been announced, the riders will go through Akron and Canton to Zanesville, where they will spend the night of Tuesday, July 16. The Baltimore tour division will also be there on that night. Instead of running straight into Springfield from Vandalia, the Chicago tourists will run from Vandalia through Dayton, to Springfield. This change is of minor importance, and is made as a compliment to Tourmaster Campbell, of the Chicago run, whose home is in Dayton.

TO ENTERTAIN TOURISTS.

SALES MANAGER W. P. SURRE, of the Continental Rubber Works, announces that when the riders in the North-eastern tour reach Erie, Pa., on their way to Columbus at noon on July 15 they will be entertained at the expense of the Continental folks. Luncheon will be served and the gasoline and oil tanks of all the machines will be filled under the direction of the Continental staff, so that the tourists will enter upon the next leg of their trip with a well-defined idea of the brand of hospitality that is dispensed at the big Erie factory. "We hope the touring squad will be a large one," writes Mr. Surre, "and no matter how large it is we will be prepared to take care of every rider. Let 'em come along; we're ready."



Part of the Crowd at Opening Meet in Columbus.



Track Officials and Jack Prince.

IMPOSING LIST OF FEDERATION CLUBS

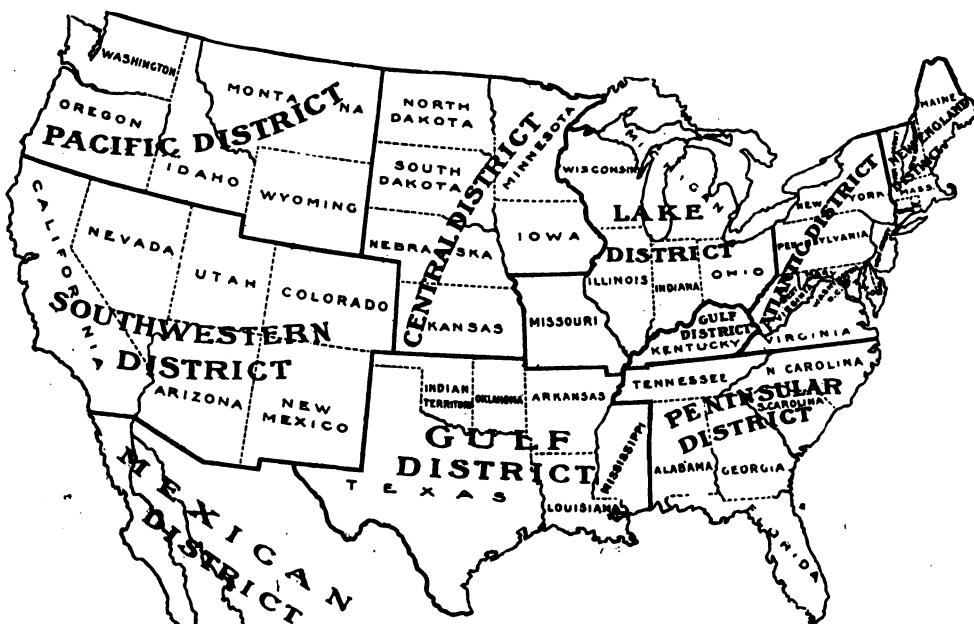
Secretary Gibson's Schedule Shows That Affiliated Squads for June Brought Line-Up Close to Three Hundred Mark—Rapid Progress During Membership Contest.

OF unusual interest to students of F. A. M. affairs is the complete list of Federation clubs printed herewith. The schedule has been prepared by National Secretary Gibson at a heavy outlay of time and energy and is important in that it tells in cold, hard figures just how the national body has progressed. The clubs numbered to 228 were affiliated prior to March 1 of the current year, and the members referred to in each case have been taken in since the affiliations. The others were brought into the ranks during the four-month term of the membership contest which closed June 30. Thirteen clubs were affiliated during March; eighteen were listed in April, seventeen during May and fifteen in June. It will be noted that the last club to affiliate in June was No. 291. Secretary Gibson's list is in full as follows:

No. 2, National Capitol, Washington, D. C., 29 members; No. 4, Linden, Brooklyn, N. Y., 5 members; No. 5, Dayton, Dayton, Ohio, 23 members; No. 8, Los Angeles, Los Angeles, Cal., 3 members; No. 9, Rhode Island, Providence, R. I., 7 members; No. 11, Indian, Cincinnati, Ohio, 16 members; No. 12, Detroit, Detroit, Mich., 1 member; No. 13, Queen City, Cincinnati, Ohio, 28 members; No. 21, Columbus, Columbus, Ohio, 18 members; No. 23, Metropolitan, New York City, 2 members; No. 24, Baltimore, Baltimore, Md., 1 member; No. 25, Syracuse, Syracuse, N. Y., 2 members; No. 26, San Francisco, San Francisco, Cal., 2 members; No. 27, Cortland, Cortland, N. Y., 33 members; No. 28, Rochester, Rochester, N. Y., 7 members; No. 29, Springfield, Springfield, Ohio, 2 members; No. 30, Poughkeepsie, Poughkeepsie, N. Y., 6 members; No. 33, Zanesville, Zanesville, Ohio, 10 members; No. 34, North Shore, Chicago, Ill., 16 members; No. 38, Terre Haute, Terre Haute, Ind., 6 members; No. 39, Jacksonville, Jacksonville, Fla., 34 members; No. 42, Waukegan, Waukegan, Ill., 17 members; No. 44, Louisville, Louisville, Ky., 5 members; No. 46, Sun Flower, Beloit, Kan., 1 member; No. 48, Bridgeport, Bridgeport, Conn., 1 member; No. 50, Providence, Providence, R. I., 14 members; No. 51, Seattle, Seattle, Wash., 8 members; No. 52, North Jersey, Paterson, N. J., 4 members; No. 54, New Jersey, Newark, N. J., 10 members; No. 55, Rockford, Rockford, Ill., 18 members; No. 56, Kansas City, Kansas City, Mo., 2 members; No. 57, Peoria, Peoria, Ill., 1 member; No. 60, Crown City, Pasadena, Cal., 1 member; No. 61, Chesters, Mt. Vernon, N. Y., 2 members; No. 62, Elmira, Elmira, N. Y., 18 members; No. 63,

Dubuque, Dubuque, Iowa, 3 members; No. 64, South Bend, South Bend, Ind., 7 members; No. 65, Omaha, Omaha, Neb., 6 members; No. 66, Boston, Boston, Mass., 7 members; No. 68, Marion, Marion, Ind., 2 members; No. 69, Akron, Akron, Ohio, 1 member; No. 70, Worcester, Worcester, Mass., 10 members; No. 72, Erie, Erie, Pa., 24 members; No. 73, Harrisburg, Harrisburg, Pa., 8 members; No. 74, South Side, St. Louis, Mo., 7 members; No. 76, Fort Wayne, Fort Wayne, Ind., 11 members; No. 79, Canton, Canton, Ohio, 13 members; No. 80, San Bernadino, San Bernadino, Cal., 2 members; No. 82, Vancouver, Vancouver, B. C., 9 members; No. 83, Peninsula, Newport News, Va., 1 member; No. 85, Kansas Short Grass, Pratt, Kan., 9 members; No. 86, Camden, Camden, N. J., 3 members; No. 87, Maryland, Baltimore, Md., 30 members; No. 88, Streator, Streator, Ill., 2 members; No. 92, South Chicago, South Chicago, Ill., 2 members; No. 93, Utica, Utica, N. Y., 10 members; No. 95, Indian, Cleveland, Ohio, 5 members; No. 96, Illinois, Springfield, Ill., 11 members; No. 97, Oakland, Oakland, Cal., 16 members; No. 98, Auburn, Auburn, N. Y., 7 members; No. 100, Porterville, Porterville, Cal., 1 member; No. 101, Austin, Austin, Tex., 1 member; No. 102, Broome, Binghamton, N. Y., 17 members; No. 103, Miami, Miami, Fla., 10 members; No. 104, Motorcycle Touring, Chicago, Ill., 7 members; No. 105, Toledo, Toledo, Ohio, 3 members; No. 106, Gary, Gary, Ind., 13 members; No. 107, Morgan County, Jacksonville, Ill., 9 members; No. 110, Philadelphia, Philadelphia, Pa., 6 members; No. 111, Frankford, Frankford, Pa., 7 members; No. 112, Topeka, Topeka, Kan., 56 members; No. 114, Invincible, Brooklyn, N. Y., 3 members; No. 117, Detroit Wheelmen, Detroit, Mich., 8 members; No. 119, San Antonio, San Antonio, Tex., 5 members; No. 122, Newark, New-

ark, Ohio, 15 members; No. 123, Cedar Rapids, Cedar Rapids, Iowa, 4 members; No. 125, Danville, Danville, Ill., 1 member; No. 127, San Jose, San Jose, Cal., 5 members; No. 128, Atlantic City, Atlantic City, N. J., 12 members; No. 129, Salina, Salina, Kan., 7 members; No. 131, Oshkosh, Oshkosh, Wis., 5 members; No. 132, McHenry County, Harvard, Ill., 6 members; No. 133, Cleveland, Cleveland, Ohio, 26 members; No. 134, Buffalo, Buffalo, N. Y., 9 members; No. 135, Indian F. A. M., Kansas City, Mo., 2 members; No. 138, Fostoria, Fostoria, Ohio, 8 members; No. 141, Yavapai, Prescott, Ariz., 2 members; No. 142, Portland, Portland, Ore., 19 members; No. 144, Waterloo, Waterloo, Iowa, 2 members; No. 145, La Porte County, La Porte, Ind., 20 members; No. 148, Will County, Joliet, Ill., 9 members; No. 151, Colorado Springs, Colorado Springs, Col., 1 member; No. 152, Albany, Albany, N. Y., 7 members; No. 154, Pomona Valley, Pomona, Cal., 1 member; No. 158, Wichita, Wichita, Kan., 28 members; No. 162, Fresno, Fresno, Cal., 10 members; No. 164, La Crosse, La Crosse, Wis., 8 members; No. 166, Piqua, Piqua, Ohio, 2 members; No. 168, Lynn, Lynn, Mass., 24 members; No. 169, Lima, Lima, Ohio, 1 member; No. 170, Bakersfield, Bakersfield, Cal., 16 members; No. 171, Staten Island, Port Richmond, N. Y., 1 member; No. 172, Washington Park, Chicago, Ill., 2 members; No. 175, Mansfield, Mansfield, Ohio, 14 members; No. 177, St. Paul, St. Paul, Minn., 8 members; No. 181, Fulton County, Gloversville, N. Y., 1 member; No. 183, Four Lakes, Madison, Wis., 7 members; No. 184, Fremont, Fremont, Ohio, 6 members; No. 185, Montgomery, Montgomery, Ala., 11 members; No. 190, Redlands, Redlands, Cal., 3 members; No. 192, Wooster, Wooster, Ohio, 1 member; No. 193, Fond du Lac, Fond du Lac, Wis., 2 members; No. 195, Davenport, Davenport, Iowa, 7 members; No. 197, Watsonville, Watsonville, Cal., 3 members; No. 198, Richmond, Richmond, Ind., 5 members; No. 200, Memphis, Memphis, Tenn., 8 members; No. 202, Reading, Reading, Pa., 8 members; No. 203, Lockport, Lockport, N. Y., 32 members; No. 204, St. Louis, St. Louis, Mo., 18 members; No. 205, New Orleans, New Orleans, La., 5 members; No. 206, Sacramento, Sacramento, Cal., 3 members; No. 207, Savannah, Savannah, Ga., 10 members; No. 208, Lorain, Lorain, Ohio, 10 members; No. 210, Sidney, Sidney, Ohio, 1 member; No. 214 Independent, St. Louis, Mo., 3 members; No. 215, Mari-copa, Cal., 9 members;



The present F. A. M. district system, which may be abolished.

No. 219, 7 members; No. 220, Hercules, Chicago, Ill., 10 members; No. 221, Newark, Newark, N. J., 3 members; No. 222, Enid, Enid, Okla., 2 members; No. 223, Boise, Boise, Ida., 4 members; No. 224, Butte, Butte, Mont., 16 members; No. 225, Flower City, Rochester, N. Y., 6 members; No. 226, Aberdeen, Aberdeen, Wash., 22 members; No. 227, Batavia, Batavia, N. Y., 15 members; No. 228, Lawndale, Chicago, Ill., 13 members.

March.

No. 229, Temple, Temple, Tex., 21 members; No. 230, Middleboro, Middleboro, Mass., 18 members; No. 231, Ithaca, Ithaca, N. Y., 22 members; No. 232, Washington, Washington, D. C., 26 members; No. 233, Olympia, Olympia, Wash., 26 members; No. 234, Plainfield, Plainfield, N. J., 26 members; No. 235, St. Cloud, St. Cloud, Minn., 25 members; No. 236, Columbus, Columbus, Ga., 15 members; No. 237, Modesto, Modesto, Cal., 41 members; No. 238, Lemoore, Lemoore, Cal., 17 members; No. 239, Muskegon, Muskegon, Mich., 20 members; No. 240, Harley-Davidson, Philadelphia, Pa., 33 members; No. 241, Attleboro, Attleboro, Mass., 30 members.

April.

No. 242, Herkimer, Herkimer, N. Y., 20 members; No. 243, Vallejo, Vallejo, Cal., 27 members; No. 244, Whittier, Whittier, Cal., 18 members; No. 245, Bay Ridge, Brooklyn, N. Y., 18 members; No. 246, Luzon, Manila, P. I., 16 members; No. 247, Bradford, Bradford, Pa., 16 members; No. 248, Berkeley, Berkeley, Cal., 17 members; No. 249, Vincennes, Vincennes, Ind., 10 members; No. 250, Pleasantville, Pleasantville, N. Y., 12 members; No. 251, Angel City, Los Angeles, Cal., 5 members; No. 252, Fort Recovery, Fort Recovery, Ohio, 23 members; No. 253, Brockton, Brockton, Mass., 55 members; No. 254, Indian, Newark, Ohio, 8 members; No. 255, Jersey, Bloomingdale, N. J., 14 members; No. 256, Hoquiam, Hoquiam, Wash., 24 members; No. 257, Muncie, Muncie, Ind., 25 members; No. 258, Homestead, Homestead, Munhall and vicinity, Pa., 12 members; No. 259, Napa, Napa, Cal., 13 members.

May.

No. 260, Santa Cruz, Santa Cruz, Cal., 18 members; No. 261, Red Bank, Red Bank, N. J., 14 members; No. 262, Kings County, Hanford, Cal., 15 members; No. 263, Hobart, Hobart, Ind., 6 members; No. 264, Galion, Galion, Ohio, 20 members; No. 265, Aksarben, Omaha, Neb., 6 members; No. 266, Somerville, Somerville, N. J., 20 members; No. 267, Evansville, Evansville, Ind., 42 members; No. 268, Fulton, Fulton, Ind., 16 members; No. 269, Portsmouth, Portsmouth, Ohio, 28 members; No. 270, Martinsburg, Martinsburg, W. Va., 14 members; No. 271, Cream City, Milwaukee, Wis., 20 members; No. 272, Warren, Warren, Pa., 12 members; No. 273, Panama Canal, Culebra, Canal Zone, 18 members; No. 274, Motorcycle Touring, Philadelphia, Pa., 11 members; No. 275, Bound Brook, Bound Brook, N. J., 21 members; No. 276, Humboldt, Chicago, Ill., 48 members.

June.

No. 277, Elyria, Elyria, Ohio, 22 members; No. 278, Columbia, Columbia, S. C., 17 members; No. 279, West Texas, Stamford, Tex., 23 members; No. 280, Austin,



Bosch Trophy.

Chicago, Ill., 24 members; No. 281, North Pennsylvania, Philadelphia, Pa., 16 members; No. 282, Indian, Mobile, Ala., 28 members; No. 283, Union City, Union City, Ind., 16 members; No. 284, Chanute, Chanute, Kan., 15 members; No. 285, East Side, East St. Louis, Ill., 28 members; No. 286, Santa Rosa, Santa Rosa, Cal., 21 members; No. 287, Carbondale, Carbondale, Pa., 14 members; No. 288, Coffeyville, Coffeyville, Kan., 16 members; No. 289, Goshen, Goshen, Ind., 18 members; No. 290, Blair County, Altoona, Pa., 11 members; No. 291, Covington, Covington, Ohio, 16 members.

FOR MERKEL RIDERS.

FRANK LIBBEY VALIANT, advertising manager in the home of Flying Merkels, has sent out a breezy circular letter informing Merkel riders throughout the country that special arrangements have been made to accommodate them at the Hotel Southern in Columbus during convention week. The Miami folks are desirous of giving the riders an opportunity to gather under one roof, and to that end they have obtained a special rate of \$1 a day, with bath, at the above-mentioned hotel. A number of Merkel boosters from the factory will be on hand to welcome the boys, and the "get together" party at the Hotel Southern will no doubt be one of the most pleasant features of the big program for riders of the orange mounts.

Advertising Manager Valiant and Mrs. Valiant will make the trip from Middletown to Columbus with a Merkel 6 and side-car. They will join the southwestern touring squad at Indianapolis.

STANDING FOR BOSCH CUP.

AS the time draws near for the F. A. M. championships at Columbus, speedsters who count upon being with the top-notchers are giving much thought to the handsome Bosch trophy, which will go to the champ who earns it on points, and the accompanying illustration proves that the riders are not interested without reason. The cup stands 20 inches high and is of sterling silver. It is valued at \$250. Although two of the championships have already been decided, any rider who makes a consistent fight at the Columbus meet will have an open chance to carry off the trophy, inasmuch as the point system extends the competition fairly throughout all the championship contests. The standing of contenders for the cup at present is as follows: John U. Constant, 12 points; Don Klark, 7 points; Don Johns, 6 points, and Erwin Baker, 5 points.

TWO CHANGES IN ROUTES.

OWING to the fact that a change has been found necessary in the itinerary for the southeastern tour to Columbus, making the first night's stop at Bedford Springs and the second at Pittsburgh, it is announced that a revision will also be made in the route for the northeastern division. Instead of making the run for the fourth day from Cleveland to Newark, 123 miles, the riders in this squad will proceed from Cleveland to Zanesville on this leg. These are the only changes officially announced since the full routes for the four tours were given publicity.

FRENCH IS CARRYING TIRES.

HOWARD A. FRENCH, who is always to the front in motorcycle affairs in Baltimore, Md., is now on his way to Columbus in his Pullman motor car, accompanied by Mrs. French and two friends. One of the latter is a representative of the Baltimore branch of the Goodyear Tire and Rubber Co., and arrangements were made to have a supply of Goodyear tires and tubes in the French car so that riders in the Southeastern tour to the convention city may be assisted along the route.

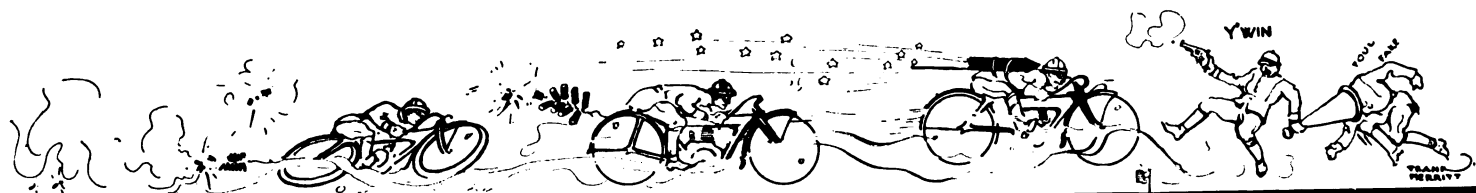
WOMAN OF SIXTY A RIDER.

DENVER has an unusual motorcycle enthusiast in Mrs. A. E. White, who, though sixty years old, believes in the pleasure and safety of the two-wheeler. She has taken several trips with her son.



George Evans in first try-out on Columbus board track.

JULY 4TH RACING RETURNS



AT ELWOOD, IND.

ELWOOD, Ind.—The motorcycle meet of the Indiana Racing Association, of Indianapolis, at the Elwood Driving Park track, on July 4, was one of the most interesting that has been held in central Indiana. The feature of the meet was the Madison County championship race for a beautiful silver cup. There were but two entries, Schafer, of Indianapolis, riding an Indian, and Eugene Culp, of Elwood, riding a Harley-Davidson. The finish was an exciting one, there being but one-tenth of a second between the machines as they went under the wire, Culp winning by a "nose." There were about three thousand people out to witness the races, and the promoters were so well pleased with the affair that they will hold another event on the Elwood track in the fall.

Elwood has one of the finest tracks in the Middle West for motorcycle racing. It is banked high on the turns, and is kept in excellent condition, owing to its being used the year round for horse training. A band furnished concerts between heats so that the large crowd was well entertained.

Miss Viola Culp, who is touted as the most daring female rider of motorcycles in the Middle West, gave exhibition rides during the afternoon, and made some remarkably fast time, outdistancing her brother who paced her with a twin-cylinder machine. Summaries:

Five-mile event for private owners.—Schafer, first; Culp, second; Richwine, third. Time, 7:05.

Ten miles, open.—Creviston, first; Schafer, second; Myrose, third. Time, 14:12.

Five miles, stripped stock.—Schafer, first; Myrose, second. Richwine was leading on the back stretch in the fourth mile, when his machine skidded, and he was put out of the race. Whipple, who was well up in the bunch, blew a tire and quit. Time, 8:01.

Five miles, open.—Myrose, first; Schafer, second; Miles, Creviston and Richwine in the order named.

Madison County championship.—Culp, first; Schafer, second, the winner making 21 miles in 30 minutes from a standing start. His competitor finished less than ten inches behind.

FREDERICKS BESTS SWARTZ.

DENVER, Col.—Rain interfered seriously with the motorcycle races at Tuileries Park on July 4 and prevented any fast time being made. A fair-sized crowd braved the threatening weather to see the speed events, and rather than disappoint the fans, the racers rode three races on a water-soaked track. The condition of the speedway, added to the fact that the heavy clouds made the day dark, rendered the work extremely perilous.

The match race between Fredericks, mounted on the machine recently ridden by "Red" Armstrong at Cleveland and Chicago, and Ed. Swartz was marked by an exceedingly close finish.

With Boyd out of the game on account of engine trouble and Armstrong's ma-

chine being eliminated, the open events were characterized by hot competition between the Merkel riders for first and second positions. Summaries:

Three-mile match race, professional, 61 class.—M. Fredericks, Excelsior; Ed. Swartz, Indian. Time, 2:15.

Three-mile open, professional, 61 class.—A. Patterson, Merkel; L. Bowen, Merkel; E. Swartz, Indian. Time, 2:14.

Five-mile open, professional, 61 class.—L. Bowen, Merkel; J. Cox, Merkel; Ed. Swartz, Indian. Time, 3:40½.

OUTSIDERS STARRED

Marietta Speed Boys Failed to Figure Among Prize Winners in July Fourth Program.

MARIETTA, Ohio.—Favored with an ideal day for the sport, the Marietta Motorcycle Club held its annual meet on the Washington County fair grounds course on July 4, some thirty speedmen participating. Upwards of two thousand persons witnessed the eight events of the afternoon. A number of cities in this section of Ohio and West Virginia were represented. Every prize fell to outsiders, not a single Marietta rider riding in the money. W. N. Williams, of Zanesville, featured, winning more events than any other rider and making the best time of the day. Two slight accidents occurred. In the fourth race, Gies, of Columbus, went through the fence on the back stretch. He was hurled into the air, alighting on the green nearby with a few slight scratches. His machine was wrecked. Shank, of Huntington, W. V., and Zinn, of Parkersburg, collided in the sixth race, the former being slightly hurt.

The Marietta Motorcycle Club, now in the second year of its existence, has a membership of some twenty-five young men. The club has done a great deal toward furthering interest in motorcycling in this locality. A fall meet will, in all probability, be held either on Labor Day or during the county fair. Summaries of July 4 races:

Two mile novice.—First, Shank, Huntington; second, Zinn, Parkersburg; third, White, Parkersburg. Time, 2:58.

Six mile open.—First, Williams, Zanesville; second, Stathers, Sistersville; third, Zinn, Parkersburg. Time, 8:41.

Four mile stock.—First, Zinn, Parkersburg; second, White, Parkersburg; third, Shank, Huntington.

Pursuit, 10 mile limit.—First, Williams, Zanesville; second, Stathers, Sistersville; third, Zinn, Parkersburg. Time, 10:40. Eight and one-half miles covered.

Five mile stock.—First, Shank, Huntington; second, Zinn, Parkersburg; third, Snedegar, Huntington. Time, 7:29.

Fifteen-mile open.—First, Williams, Zanesville; second, Zinn, Parkersburg. Time, 20:48½.

Time trial.—Williams, Zanesville; time, 1:18¾; Shank, Huntington, time, 1:25¾; Breamer, time 1:27¼.

Twenty-five mile open.—First, Shank, Huntington; second, Stathers, Sistersville; third, Zinn, Parkersburg.

LEBANON'S HOLIDAY MEET.

LEBANON, Ind.—Motorcycle races promoted by G. N. Shelby and E. M. Adney, of this city, drew a large crowd on July 4. The track was heavy, but several of the finishes were fast. Prizes valued at \$300 were awarded the winners.

Ray Hostetter, while taking a turn in the second event, skidded into the fence, but climbed back into the saddle and by sensational riding managed to pull into third place. The officials were Mark Adler and Omer Burgin, of Lebanon, timekeepers; J. H. Kinney, of Indianapolis, State referee; John Hohl and John Merz, of Indianapolis, starters. Summaries:

Six miles, 30.50 cu. in., stock.—Stewart Davis, of Kokomo, Merkel, first; R. L. Kinney, of LaFayette, Harley-Davidson, second; H. Mayer, of Indianapolis, Thor, third. Time, 8:25.

Five miles, 30.50 cu. in., stock.—Noble Shepard, of Kokomo, Merkel, first; R. L. Kinney, of LaFayette, Harley-Davidson, second; H. Mayer, of Indianapolis, Thor, third. Time, 7:35.

Five miles, 50 cu. in.—R. L. Kinney, of LaFayette, Harley-Davidson, first; Noble Shepard, of Kokomo, Merkel, second; Stewart Davis, of Kokomo, Merkel, third. Time, 7:35.

Five miles, tri-county, 30.50 class, stock.—Ray Hostetter, of Indianapolis, Merkel, first; R. L. Kinney, of LaFayette, Harley-Davidson, second; H. Mayer, of Indianapolis, Thor, third. Time, 6:57.

Twenty-five miles, 50 cu. in.—Ray Hostetter, of Indianapolis, Merkel, first; P. O. Heckman, of Kokomo, Merkel, second. Time, 19:33.

Match race, five miles, 30.50 cu. in.—Ray Hostetter, of Indianapolis, Merkel, first; P. O. Heckman, of Kokomo, Merkel, second. Time, 6:32.

THREE SPILLS AT ELGIN.

ELGIN, Ill.—Three spills marked the races held at Wing Park on July 4 by the Elgin Motorcycle Club. Reuben Nelson skidded into the center of the track and sustained a fall which broke one of his toes; Walter Treiber struck the fence on a turn and sustained cuts and bruises, and Edward Smith received a severe shaking up when he ran into the infield railing. The injured riders received prompt medical attention and were able to go to their homes. Despite the slippery condition of the track, due to a heavy rainfall in the morning, all the events were interesting. Summaries:

Five mile, free-for-all.—Snowden Lonberger, Indian, first; Walter Treiber, Indian, second; Charles Treiber, Indian, third. Time, 6:44.

Five mile, 30.50 class.—Paul Deak, Yale, first; Charles Priller, Indian, second; Roland Fletcher, Excelsior, third. Time, 6:38½.

Five mile, 61 class.—Snowden Lonberger, Indian, first; Frank Head, Indian, second; Earl Copper, Excelsior, third. Between 6,000 and 7,000 people witnessed the races.

RACES IN PERRY

DES MOINES, Iowa.—The Des Moines Motorcycle Club, at the invitation of several of the business men of Perry, Iowa, pulled off a series of motorcycle races in that city on July 4.

L. A. Scheible rode a mile on an Excelsior in 1:24, with an automobile to pace him. In one race Scheible was thrown from his machine by a tire blow-out and was slightly bruised.

PECK STARS AT NEWARK

Los Angeles Comet-Chaser Sets Hot Pace for Opening of Jersey's New Board Saucer.

NEWARK, N. J.—Newark's board saucer was opened under auspicious conditions on July 4 when a crowd of 8,000 fans cheered the riders in nine snappy events. The races were so well handled that the program was completed in two hours and a half. Mayor Haussling fired the starting gun in the first event.

Ray Peck (Excelsior), of Los Angeles, was the star of the meet, winning from Arthur Chapple (Indian) in every event they entered. Chapple, however, was a good second except in the last race, the free-for-all, when his motor went dead in the third lap. Fleckenstein (Indian), of Denver, was then placed second, but his machine also went wrong in the last lap and West shot into second position. Fleckenstein gave a great exhibition in the 2-mile, Class A event when one of his tires jumped the rim and wrapped up in the wheel. The rider managed to stop his ma-



New Jersey Club's Racing Stars.

Segelbach, Brown, Drummond.

chine without a fall and the crowd cheered him.

The Class B riders made a good showing, inasmuch as they are new to the game, especially Freddie West, the old six-day bike rider, who has forsaken the bicycle game for a faster sport. Three heats were necessary to decide the winner of the match race between Carl Segelbach and Wm. Brown, both members of the New Jersey Motorcycle Club. In the first heat, Brown who took the lead at the start and was never headed. Segelbach turned the tables in the following heat. In the third and

deciding heat the men were neck-and-neck at the bell lap and inches separated them at the finish, with Segelbach in the lead.

The final event of the afternoon, a four-mile race brought together the Class A and Class B professionals. There were five starters. It was exciting from start to finish. West, after getting off to a bad start, plugged away and came within an ace of nipping Peck at the tape. Johnny King followed West home, while Fleckenstein crept into fourth place. Summaries:

Match race between Carl Segelbach and Wm. Brown—First heat, one mile, won by Brown; time, 54¾. Second heat, two miles, won by Segelbach; time, 1:50¾. Third heat, three miles, won by Segelbach; time, 2:44.

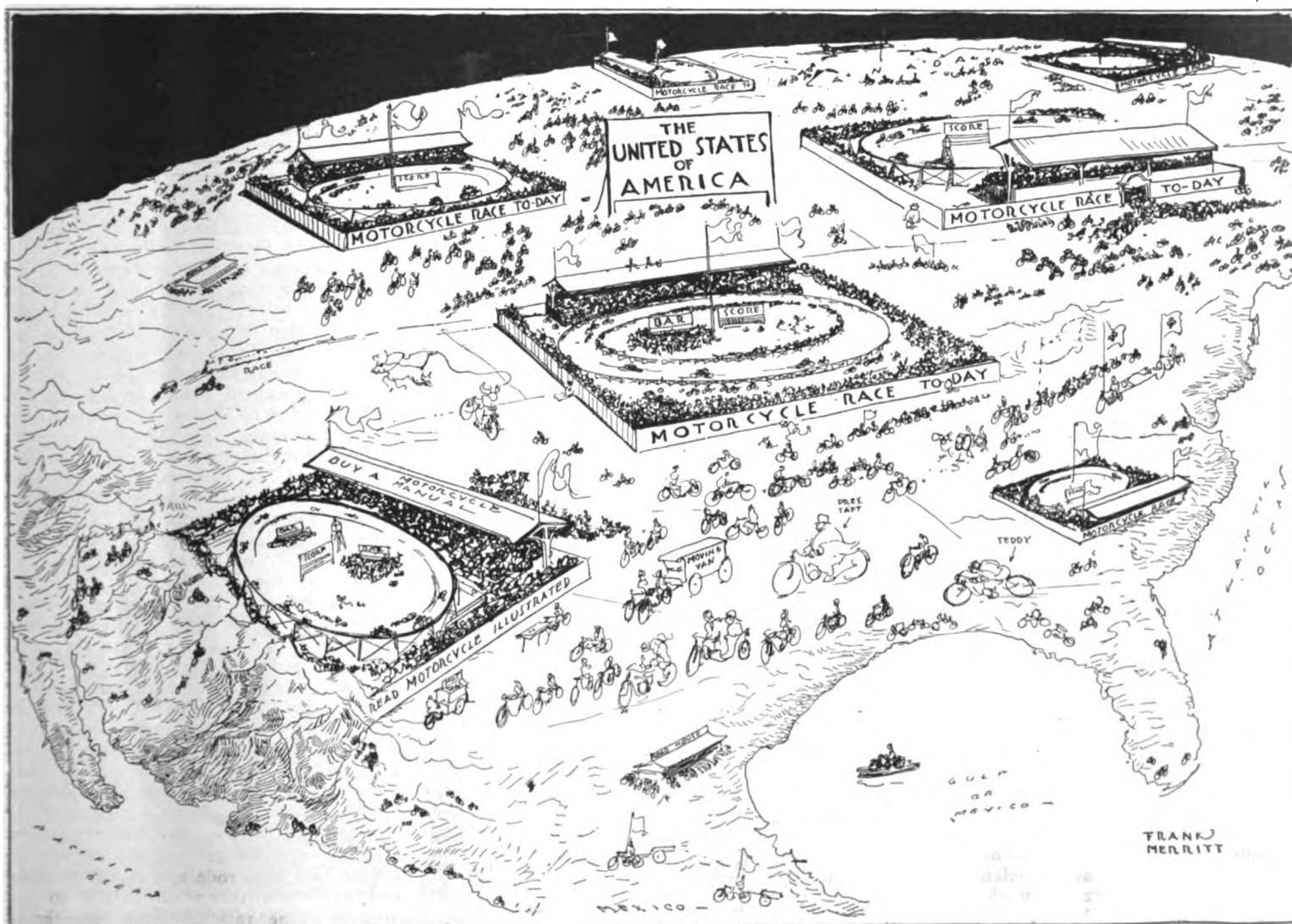
Three-mile open (Class B professional)—First heat won by Albert Carlson, Providence; Freddy West, San Francisco, second; Johnny King, third; time, 2:37¾. Second heat won by West; King, second; Carlson, third; time, 2:28¾.

Two-mile open (Class A professional)—First heat won by Ray Peck, Los Angeles; second, Arthur Chapple, New York; third, Lawrence Fleckenstein, Denver; time, 1:31¾. Second heat won by Peck; second, Chapple; third, Fleckenstein; time, 1:26¾. Third heat won by Peck; second, Chapple; third, Fleckenstein; time, 1:24.

Four-mile free-for-all, professional—Won by Peck; second, West; third, King; fourth, Fleckenstein; time, 3:08¾.

Eddie Hasha, the "Texas Cyclone," blew into town on the 7th, intending to participate in the races Saturday and Sunday, but Manager Paul Derkum postponed them for a week on account of the unfinished condition of the grandstand.

(Other Racing News on pages 56-61.)



A Birds-Eye View of the United States on a National Holiday in Summer Time.

COLUMBUSITES ON NEW ENGLAND TOUR

Good Roads and Pleasant Scenery Feature Eighteen-Day Trip From Buckeye Capitol to Boston and Return—
Nervy Rider Covers Route a Second Time Alone.

FOLLOWING is a graphic account of a motorcycle tour from Columbus, Ohio, to Boston, Mass., and return, recently made by four Columbus enthusiasts, Clay W. Roberts, O. G. Rowland, R. H. Snyder and W. M. Mathews. The story is written from the diary of Mr. Roberts, who was so well satisfied with this outing that he decided to repeat the trip and is now on his way home after a second lap over the long route. Roberts' story of the original tour is as follows:

In keeping with plans which had been completed several months in advance for a trip into New England we packed the last of our luggage on the evening of June 16 and early on the following morning I slung my trusty camera over my shoulder and we were ready for the start. We chugged out of Columbus at 6.30 a. m. with "Boston or Bust" as our slogan, and before we had gone very far it began to look as if we would have to place special emphasis on the "bust." At Delaware, 25 miles from Columbus, there was a heavy rainfall and we were forced to make a stop. At noon, however, the sky cleared and we were soon under way again. Naturally, the roads were full of mud and water and riding became a question of skill and considerable nerve. Progress was slow but we managed to reach Bucyrus at 7 o'clock in the evening, tired, wet and hungry. Still we were satisfied for we had ridden 61 miles in spite of the delay and the bad roads.

Off for Cleveland.

On the next morning (Sunday) we cleaned our machines and left for Cleveland, where we arrived in the afternoon. We remained there for the night and pulled out for Buffalo at 6 a. m. on Monday morning. Without any difficulty to speak of we reached Buffalo at 5 p. m. on Monday, having traveled 195 miles. We encountered some sand between Geneva, Ohio, and Conneaut, but after crossing the Ohio line we had fine roads. From Erie, Pa., to Buffalo we rode much of the time in sight of Lake Erie and the scenery was impressive. Mile after mile of the route trailed through vineyards. On Tuesday we rode to Niagara Falls and then to Buffalo, leaving on the following morning for Rochester. For this leg of the trip we had two more riders in our party, J. E. Campbell, of the New Era staff, and Frank L. Valiant, of the Merkel forces. Campbell piloted us to Batavia and Valiant accompanied us to Fonda where he met with an accident. Just before we reached Batavia, Mathews, of our party, was thrown from his machine and his motor was so seriously damaged that it was impossible to make road repairs. Accordingly, we made arrangements for him to ship his machine to Boston and meet us there.

Welcomed in Rochester.

When nearing Rochester Valiant's machine broke a connecting rod and piston, and while he was being towed into the city

he and his machine were run down by a woman driving an automobile. Both Val and his mount were in bad shape when they finally reached Rochester. A repair man worked all night and all the next day on the damaged machine, while we viewed the sights of the city. On our arrival in Rochester we met Dr. Clint LaSalle, vice-president of the Atlantic District of the F. A. M., who spent the evening with us and escorted us about. The roads in and about Rochester are in fine shape, the section from Scottsville being particularly good.

We left Rochester at 6 p. m. and rode to Geneva where we put up for the night. This was the only place on the route, by the way, where they tried to separate us from all the money we had, so in future we will not make a stop there.

On Friday morning we pulled out of Geneva, and at Cuyahoga Lake we were ferried across on an old canal boat propelled by a motor. The scenery in this district is beautiful, and it was with reluctance that we continued on our way. We had dinner at Syracuse, after riding over some rolling country, and then proceeded to Rome, where we remained overnight. We encountered quite a few hills, but as the road surfaces were good, we experienced no serious trouble. Several toll gates proved novel to us, as we have none in Ohio. Early on Saturday morning we left Rome and headed for Pittsfield, Mass., through the picturesque Mohawk Valley. From Rome to Little Falls the road is in excellent condition, but from the latter point to Fonda the going is rough and there are a number of hills. The beautiful valley with its winding river makes the rider forget his road troubles, however. Everything had gone well with us since leaving Rochester, aside from a broken inlet valve on my machine and several punctures for the other members of our party, small matters in our opinion.

Valiant in Bad Spill.

At Fonda we were due to have serious trouble, for Valiant lost control of his machine when rounding a bad hill and crashed into a stone wall, which is intended to protect vehicles against dropping over a 40-foot bank to the New York Central railroad tracks. Through the liberal use of cold water we managed to bring Val around, but his machine was so badly damaged that it could not be patched up for the remainder of the trip to Fonda. Accordingly we hid it in a clump of bushes and carried Valiant into the town on the tank of one of our machines. We left him in Fonda and then struck out for Albany. The road was good until we reached Amsterdam, but at this point repairs were being made on the State road along the river, and we were compelled to take to the hills. We found some steep grades, but none that a good 7 h. machine could not climb. After riding about 10 miles we struck the State road again, but repairs were also being

made at this point, and our progress over it was slow.

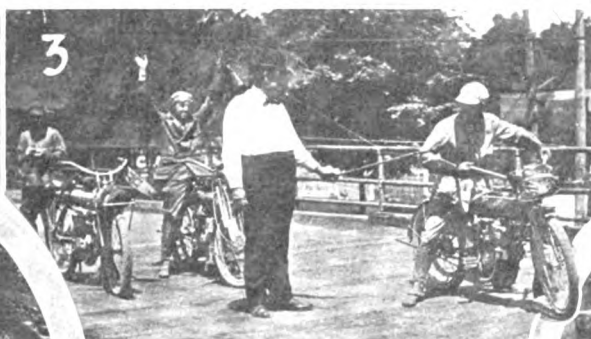
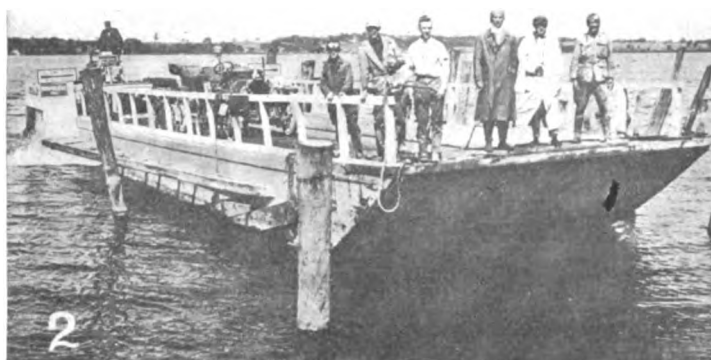
A Surprise at Albany.

When we arrived at the Merkel agency in Albany at 5 p. m. we were told that Mathews who had damaged his engine at Batavia, had just pulled out for Pittsfield. This came as something of a surprise, as we had taken it for granted that we would not see him again until we reached Boston. The road from Albany to Pittsfield is ideal. There is quite a steep climb over Mt. Lebanon, but the road is in good condition and is well protected at all danger points. When the summit of the mountain is reached there is a remarkable view which forces the rider to decide on the spot that he will return to take advantage of it again. When we resumed our trip to Pittsfield we had traveled only three miles when we caught up with our old friend Bill Mathews, chugging along contentedly and keeping his weather eye open for us. There were handshakes all around, and then Bill told his story. He had remained at Batavia for two days and had his machine repaired instead of shipping it to Boston, and had then started out to overtake us. He found at Oneida that we were only fifteen minutes ahead of him and decided that he could catch up with us at Utica. We went to Rome, however, and he lost all trace of us.

The Run to Boston.

On Saturday night we had a reorganization party in Pittsfield, and early on Sunday morning we headed for Boston. As we jogged along through inviting woodland, over rustic bridges and up-winding roads we agreed that it would be difficult to find a more attractive district, and my camera came into action more than once. We arrived in Springfield, Mass., at 2 p. m., and then proceeded to Worcester, where we remained overnight. On Monday morning we visited the Graton & Knight factory, and also met Mr. Persons, the genial head of the Person's saddle factory. In Boston we made the acquaintance of W. H. Mann, the hustling Merkel agent. After looking around the city we pulled out at 3.30 p. m. on Tuesday for Providence, R. I., where we remained until the following morning. Our next jump was to Narragansett Pier. Near Westerly, Conn., we found the worst stretch of road on our entire trip. The sand was so deep that we could barely make headway, but we finally reached the ferry and crossed over the Thames river into New London. Here we learned that the ferry at Lime had been burned and that it would not be in operation again for several days, so we decided to ride northward through Connecticut. After traveling a few miles, however, we were glad to return to New London as we could not make headway through the sand.

On our arrival back in New London we managed to make arrangements for shipping our machines on a railroad freight



IN THE EMPIRE STATE AND NEW ENGLAND

1. Near Erie, Pa. 2. Cayuga Lake Ferry. 3. "Held Up" by a toll-keeper. 4. A stop for water in the Berkshire Hills. 5. The first puncture. 6. Toll-gate near Syracuse. 7. "The Four of Us." 8. Near Fonda, N. Y., where Valiant hit stone wall. (Story on opposite page.)



boat running to New York City, and we also made the trip on this craft. We spent Thursday in New York and on Friday we rode to Philadelphia, Pa. Here our party divided, Mathews and myself riding on to Pottstown, and Rowland and Snyder announcing that they would tour a bit in southern Pennsylvania and then crate their machines and start for home. On reaching Pottstown I decided to crate my machine and ship it back, as I had to return to work on the following Monday morning, but Mathews completed the run to Columbus. The total distance covered was 2,460 miles for Mathews, and the mileage for the other members of the party was not much less. We had been on the road 18 days, and Mathews' breakdown at Batavia was the only serious trouble encountered by any member of our quartet.

Second Tour a Success.

On his second trip from Columbus to New England Roberts was accompanied as far as Geneva, Ohio, by Frank Thaler. The latter met with an accident at that point and was obliged to turn back, but Roberts plugged on alone, reached Buffalo in good time and then made the trip across New York State without trouble. After a short tour in New England he rode down along the Hudson to New York City, dropped in at the office of *MOTORCYCLE ILLUSTRATED*, and then continued on his way to Philadelphia. He reports that the roads eastward from Cleveland are in fine condition except for a few stretches which are undergoing repairs. From Erie to Buffalo the roads are good and the same conditions prevail between Buffalo and Rochester. The river road across the State to Albany offered

good going, and on the whole Roberts had no room for complaint as to roads. On his first trip eastward Roberts mounted a Flying Merkel twin, but on his last tour he rode a 7-Indian.

NEW ROUTE TO CONEY ISLAND

A NEW route to Coney Island, N. Y., is now open and affords quite a short cut to the popular amusement resort, and also runs close to the Brighton Beach Motordrome. Starting from Brooklyn, take Bedford avenue, from any of the bridges and follow it to Eastern Parkway and there instead of turning right down Eastern Parkway toward Prospect Park keep straight ahead on Bedford avenue, crossing Eastern Parkway and leaving the Slocum statue on the left. Immediately down the steep hill pass the armory of Squadron C, also on the left. On the right will be seen the concrete foundations for the grand stands of Ebbets Field.

Keep straight on, crossing the railroad tracks at Malbone street. Pass Lincoln road, which leads to gate in Prospect Park, and also pass Robinson lane-Parkside avenue, the usual routes across to Ocean Parkway. Keep straight on Bedford avenue, passing the Cortelyou clubhouse on the left and immediately thereafter crossing the tracks at Flatbush avenue.

Here slow up, passing the billboard fence on the right, and on the sharp curve leave Bedford avenue, passing an apartment house on the right and enter Foster avenue, which has just been asphalted. Keep straight on through South Midwood, over the Brighton Beach covered railroad crossing and over the trolley crossing at Coney Island avenue to Ocean Parkway. The parkway itself will be recognizable by its width, but there is an iron

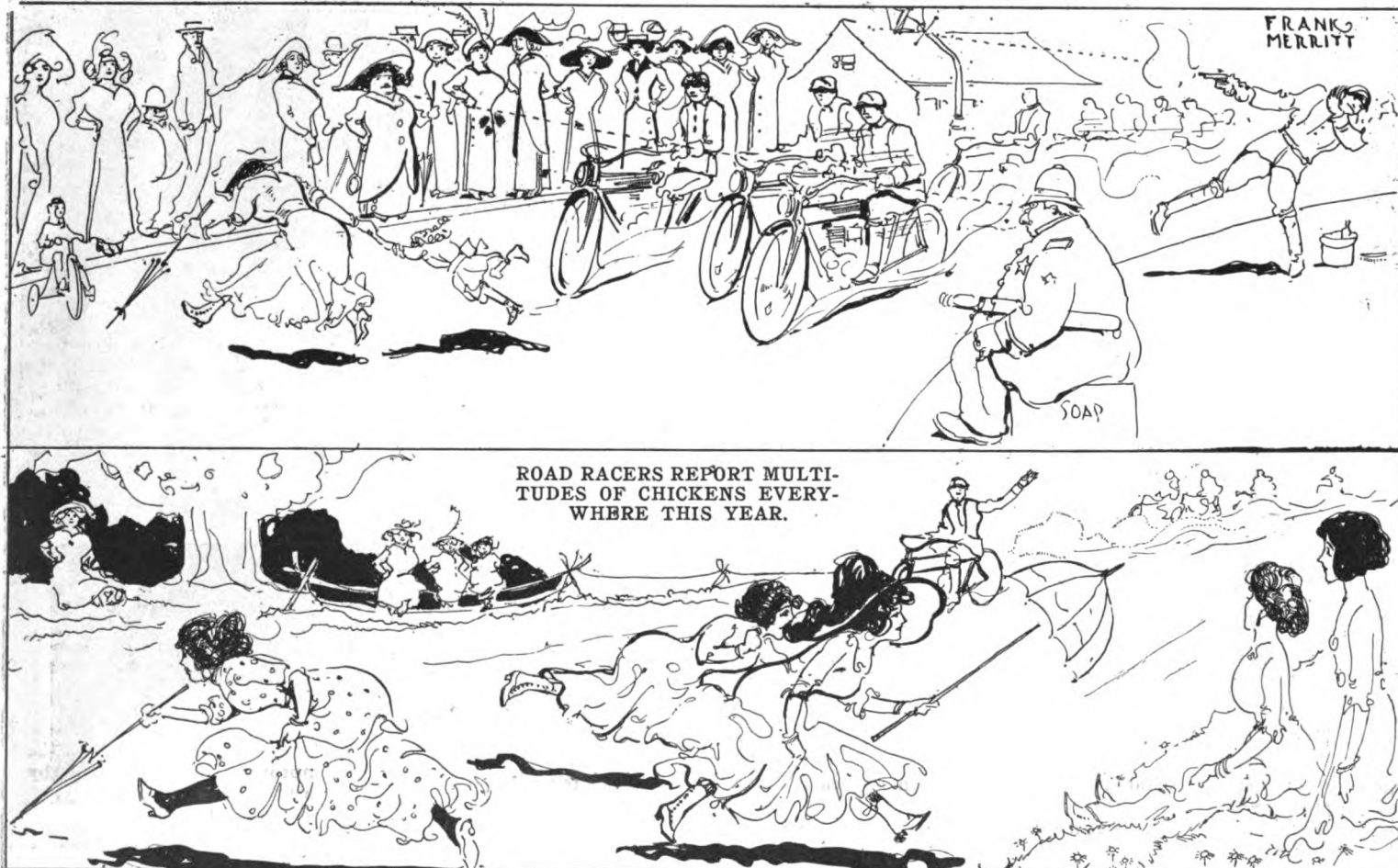
railing surrounding the old Shults trotting stables on the right and the new brown brick church on the western side of the Ocean Parkway which will serve as landmarks. Here turn left into Ocean Parkway, Foster avenue being at this point one and one-half miles from Prospect Park and four miles from Coney Island.

Coming back from Coney Island toward New York after leaving the defunct trotting horse speedway at Twenty-second avenue there is a slight rise in the road at the Long Island Railroad tracks over the covered cut, then Foster avenue with its single row of electric lights on its north side comes in immediately on the right. The iron railing surrounding the stable is then on the left hand side of Foster avenue. The church is also on the left behind the trees. Keep straight on Foster avenue to its junction with Bedford avenue at Flatbush avenue and then to the Slocum statue at Eastern Parkway and Bedford avenue.

MORE POWER TO HEYBURN!

WASHINGTON, D. C.—Senator Heyburn, of Idaho, has introduced an amendment to the sundry civil bill now before the Senate, providing for an appropriation of \$250,000 for the purpose of improving the highways in the Yellowstone National Park. The expressed object of the appropriation, according to Senator Heyburn, is to make it easier and safer for operators of motorcycles, and other motor vehicles, to use the roads in the Yellowstone Park.

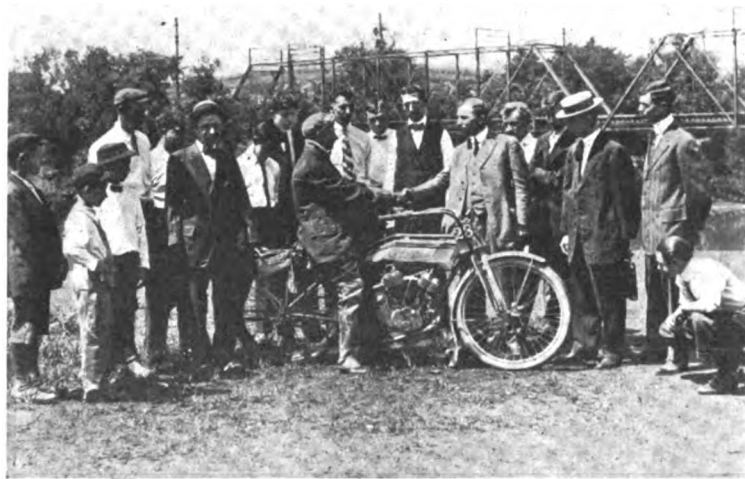
SIX out of nine rural mail carriers operating out of Bridgeton, N. J., are delivering their mail on motorcycles.



OMAHA DEALER COMPLETES A LONG GRIND



W. E. Dewey.



Greeted by W. F. Remppis in Reading, Pa.

W. E. DEWEY, of Omaha, Neb., western representative for the Reading-Standard Company, pulled into Reading, Pa., on June 29 after a most remarkable trip from his home city. Mounting an R-S twin, Dewey overcame all kinds of obstacles, plugged through good, bad and indifferent roads, smashed his rear wheel twice and still completed the run of 1,462 miles in 64 hours' riding time. He left Omaha on June 23 at 1 p. m. and arrived in Reading at 12.15 p. m., six days later. All in all the performance is one of the best that has been recorded for a cross-country trip, and the success attending it has led Dewey to announce that he will probably attempt to lower the trans-continental record from San Francisco to New York. If his present plans do not miscarry the nervy Omaha dealer will start from the Pacific coast in September, taking the northern route to New York City, via Chicago. He intends to ride a Reading-Standard twin and is convinced that he can clip days from the present record.

It is worthy of note that Dewey carried no luggage on his recent trip from Omaha to Reading and that his tool kit was a light one. He felt competent to meet any emergency on the road, and therefore took chances at which many a veteran rider would have balked. That he finished the trip in the remarkable time noted proves that his confidence was not misplaced. His "log" shows that the roads were in fine condition from Omaha to Chariton, Iowa, this jump being made in the first day's riding. When he left Chariton for Burlington road conditions were not so favorable, but fair progress was made. The roads were graded up in the center so that considerable skill was required to avoid spills. At Burlington Dewey crossed the Mississippi on a ferryboat, and then ran into 40 miles of bad going. For some distance from the river the highway was almost impassable, being muddy and deeply rutted, but the Omaha plugger stuck to his saddle. When he reached Monmouth, Ill., he found the roads still in bad condition and from this point to Peoria the going was of the heaviest kind.

The start of the third day's trip was from Peoria to Bloomington. On this stretch the poor roads continued, but from Bloomington to Danville better time was made. Twenty miles west of Danville the rider encountered his first trouble in the shape of a bad puncture. He managed to make repairs and then plugged onward, but after riding three miles he crashed into a deep washout in the road and smashed his rear wheel. For a less intrepid rider this accident would probably have ended the trip, but Dewey had no idea of giving up the fight and after four hours of hard work he was able to start again, having hammered his rear rim into rideable condition with a rock. On reaching Danville he made further repairs and then rode on to Indianapolis. Between Danville and the latter city he found fair roads.

The trip for the fourth day was from Columbus to Pittsburgh. Very choppy roads were encountered between the Buckeye capital and Bellaire, Ohio, but from Bellaire to Pittsburgh the conditions were improved. The fifth day put the rider to some of the most severe tests of the entire trip. From Pittsburgh to Shippensburg, over the Allegheny mountains, the roads were rough and very rocky and to add to his troubles Dewey was caught in a typical mountain storm. While going down a steep muddy grade his machine skidded into a ditch and the rear wheel was smashed again. Once more a rock was called into action and the rim was hammered into such shape that riding was possible. There was no place within reach where tools might have been obtained and the heaviest tools in Dewey's kit were an 8-inch wrench and a pair of pliers. Eight miles west of Shippensburg another bad puncture delayed the rider. He had run out of cement, but being supplied with a number of self-sealing patches to was able to make repairs. He admits that if his kit had not contained these patches there would have been a decidedly different story to tell concerning his time for the trip.

On Saturday, the sixth day, Dewey made the run from Shippensburg to Reading over good roads and without difficulty. His record for the trip showed that he had used 16 gallons

and 1 quart of gasoline on the journey of 1,462 miles, so that his consumption was at the rate of one gallon for 89.97 miles. Dewey reports that he had no engine trouble throughout the grind and that he was not even compelled to clean a spark plug. But for the unfortunate accidents in which his rear wheel was damaged the Omaha rider is convinced that he could have cut down his running time at least half a day. The fact that he made the run from Omaha to Reading in six days in spite of the delays leads him to believe that with ordinary luck he can clip the trans-continental record now held by Volney Davis.

After laying off for a few days' rest in Reading Dewey visited New York City, dropped in at the office of *MOTORCYCLE ILLUSTRATED* to leave a few modest notes on his trip and then started homeward by train.

FAVORED BY CONGRESS.

WASHINGTON, D. C.—Eight motorcycles are now in use by the government department in Washington, and the officers in charge of the department using them are loud in their praise. Comment has been caused by the extent to which the motorcycle has figured in legislation before Congress at the present session, illustrating the recognition of it by men in official life. One of the leading members of Congress, discussing the extent to which the motorcycle is now used for both pleasure and business purposes, says that he expects remarkable developments in the use of the machine in the near future.

It is the favorable attitude of members of Congress toward the motorcycle which gives rise to the belief that measures certain to come, providing for the extension of its use in government affairs, will be strongly supported. The most recent use to which the motorcycle has been put by federal department heads is in connection with messenger and police service in different national parks.

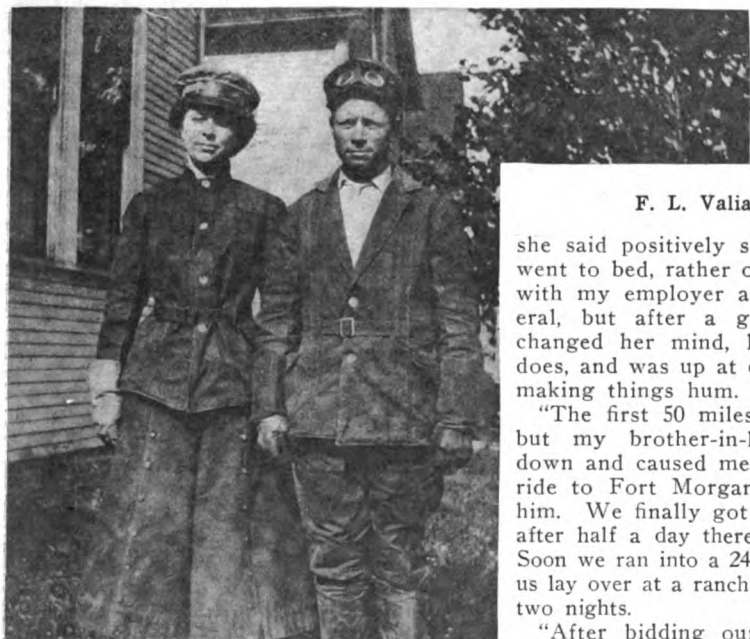
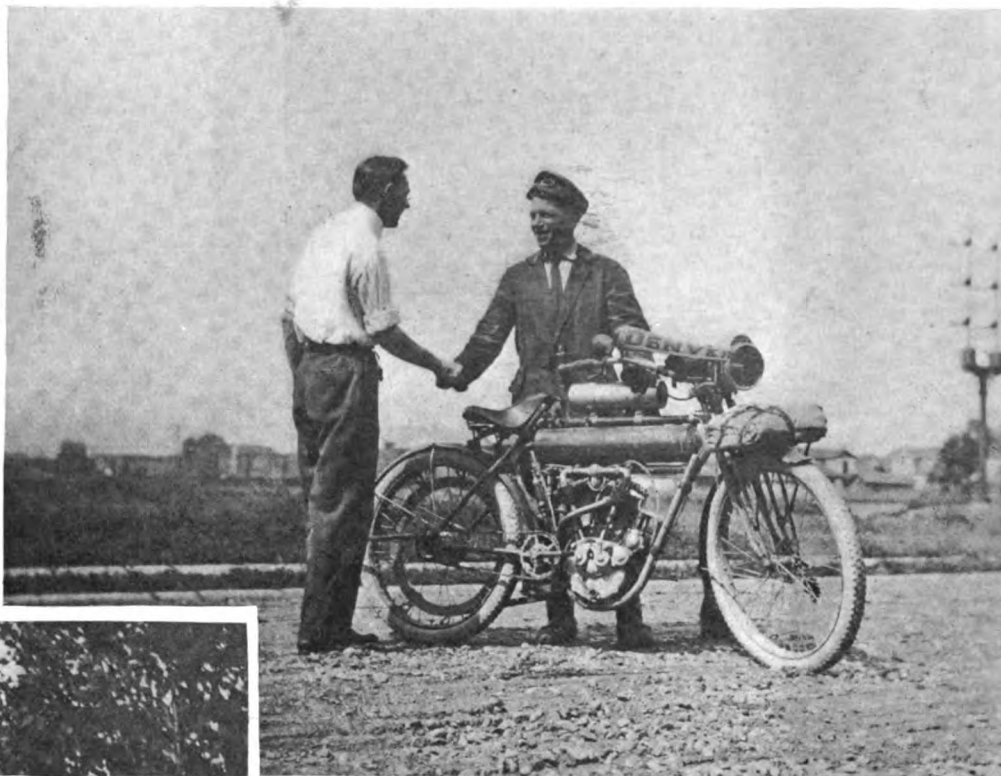
C. F. Gates, of *Pacific Motoring*, is well on his way to Columbus by motorcycle.

TANDEM TOUR TO CONVENTION CITY

Denver Motorcyclist and His Wife Ride to Columbus Over Mountains and Through Mud and Sand Without a Spill or Even a Bent Pedal—Amusing Incidents Along the Route.

L. L. PARKER, an enthusiast of Denver, Col., accompanied by his wife, recently completed a tandem trip from the Mile High City to Columbus, Ohio, without a spill or other road trouble aside from several punctures. A Merkel 6 was used for the jaunt of 1,961 miles, and despite the fact that road conditions ranged from fair to bad there were no serious delays. Mr. Parker tells his story as follows:

"For a long time my wife and I had talked of touring eastward on our Merkel 6 and in vain we tried to get up a party of two or three other couples to accompany us. Finally we decided to make it alone. Our friends said we were foolish to undertake the long trip and that no motorcycle would prove capable of carrying two heavy-weights over such a long route as we proposed, particularly as we had a lot of sand and mud and several mountain ranges to traverse. Having confidence in our machine, we were willing to take our chances. We planned to start from Denver on June 15, so that we could allow 32 days for the



Mr. and Mrs. Parker.

run to Columbus for the National F. A. M. meet. All of this time would not be required, of course, so we planned to visit relatives en route.

"However, the old saying, 'There's many a slip 'twixt the cup and the lip,' proved true in our case. My plans and the plans of my employer did not dovetail, and when I asked for three months off, from June 15 to September 15, I was told that he would think the matter over. This looked so good to me that I let it go at that, but on May 1 he came to me and said: 'If you want such a long vacation, be ready to start it May 10.' You can imagine how that upset us, because every woman is like every other woman in the matter of preparation. When I told my wife that she had only ten days to get ready for the trip

F. L. Valiant Congratulating Parker Upon His Arrival in Middletown.

she said positively she would not go and went to bed, rather out of humor with me, with my employer and the world in general, but after a good night's rest she changed her mind, like a woman always does, and was up at daylight next morning making things hum.

"The first 50 miles was splendid riding, but my brother-in-law's machine broke down and caused me to make a forty-mile ride to Fort Morgan for repair parts for him. We finally got to Fort Morgan, and after half a day there we started out again. Soon we ran into a 24-hour rain, which made us lay over at a ranch house for one day and two nights.

"After bidding our hosts at the ranch good-bye, we set out over very muddy roads. As far as Lincoln, Neb., we followed the recognized automobile road, and then went south through Beatrice, Neb., to Wyomere. At Beatrice we stopped for repairs on my partner's machine, and as the roads through this part of the country were pretty rough and it was rather late (7 p. m.) we were in doubt whether to try to make Wyomere that night, as the distance was 18 miles. However, the natives told us we would have fine, level roads from there on, and we thought we would try and make it before bedtime. I wish some of the boys in the Columbus tours could have seen those 'level' roads. At one place it was so steep I stopped my machine and asked a rancher what they call a level in that part of the country. His reply was: 'Well, as long as we can pasture it we call it level, but, of course, when the stock can't stick on the hillsides, we call it hilly.'

"There were lots of amusing incidents during the ride, but I think the most welcome sign I saw was at a railroad tank station, coming through Nebraska. We had ridden practically all day and were pretty tired and hungry, with no chance of getting to a town before night, and my wife was beginning to wish that she had not come on the trip when we saw a railroad tank on the horizon. We knew that this meant shelter, if not food, but we were agreeably surprised when we chugged up to find that there was a station there, embellished by a sign which, despite our stiffness from the long day's ride, made us smile. The sign bore the quaint legend:

Meal, 25c. Square Meal, 50c. Gorge, 75c.
Wearied Strangers Fill Up and Bust.

"Our worst trouble through Nebraska, Kansas and Missouri was to procure air-cooled oil and to get out of the small towns once we got in. A man would have to listen to everybody in town to find the oil, and then the best we could get was an inferior grade of Polarine, and by the time we managed to get hold of this there would be such a crowd around the machines that we would have to beg them to get out of our way so that we could get started. Some of the people had never before seen a motorcycle, and naturally, we were deluged with questions of all kinds. One man near Macon City said he thought there

ought to be a law against going around the country on a tandem machine. 'It's bad enough for a man to risk his own fool neck on a go-devil like that there benzine buggy,' he said, 'without making his wife risk hers, too.' When I told him that my wife was anxious to accompany me, that we had not a single spill and that her health was better than when she started, he was incredulous.

"One incident occurred after we had shipped our camera ahead on account of the rough roads that made me regret my inability to obtain a picture. The lady of the house where we were given shelter over night was six feet one inch tall and weighed 240 pounds. During the evening's conversation she suddenly decided she would like to have a ride on the motorcycle, as she had never been on anything faster than a horse. The next morning she persuaded my wife, who weighs about 150 pounds, to let her try to put her suit on. Well, she got it partly on, and with the aid of a dozen big safety pins—the kind that are used to pin horse blankets around live stock—she made the skirt stay up high enough so that she could cover the gap with a three-quarter winter coat she had. Then I said to myself I'm in for it. All I could do was to groan and accept the issue cheerfully, for the people had been hospitable and had refused to accept a penny for our meals and lodging; therefore, I grinned and prepared for the worst. We went out into the main street and it seemed that everybody in town had got wind of the affair and had turned out to see the fun, and fun it nearly proved to be, for 240 pounds on a tandem attachment, and said 240 pounds never having been on a machine before, is rather unwieldy baggage for even as hardy a rider as myself. However, after three or four attempts, I made good. I did not take any chances; just went around one edge of the town, so that I would not have to risk getting off and on again. When we came back to town, after making a circuit of about five miles, you would have thought there was a holiday. It seems that after we had started fifty or sixty people who had been up when we began the ride had quickly spread the news throughout the town, and there were two or three hundred people lined up in the center of the town to watch the triumphant approach of the trusty Merkel 6 and the champion heavy-weight of the town. I think I lost three pounds during the ordeal.

"When I left Colorado the farmers thought they were slow with their spring crops, on account of the wet, cold season and were kicking to beat the band, but when I crossed the river at Beardstown the bottom land was mostly under water. Instead of swearing, the farmers were all out fishing and enjoying themselves. Coming into Decatur we found very good roads, as it had not rained for about ten days. After we had eaten we saw it was going to rain, and not wishing to get laid up in the mud we decided to get out, which we did, leaving town on the east side, while it was raining on the west side. We kept ahead of the rain from Decatur Ill., to Covington, Ind., a distance of 110 miles, making it in five hours, with two stops, one for gasoline and one to fix a puncture.

"After striking the Indiana roads, we came as far as Indianapolis, where my wife

wished to visit some relatives for several days, so I decided that I would run down to the Miami Cycle & Mfg. Company's plant, where the Flying Merkels are made. There I was greeted by Joe Merkel, President Jacoby, F. L. Valiant and the rest of the boys, and to say that I was treated royally is putting it mildly. After spending a few days at the factory I went back and picked up my wife, and then we toured into Columbus.

"In conclusion, I will say that outside of punctures, we had no trouble whatsoever, despite the rough roads and the extra weight that our machine had to carry. I consider it marvelous that we succeeded in getting through without even breaking a pedal. Our route from Denver was via Fort Morgan, Sterling, Haxton, Holyoke, Col.; Culbertson, McCook, Holdridge, Hastings, Lincoln, Wymore, Neb.; St. Joseph, Chillicothe, Macon City, Hannibal, Mo.; Quincy, Springfield, Beardstown, Decatur, Danville, Ill.; Covington, Attica, La Fayette, Frankfort, Lebanon, Indianapolis, Richmond, Ind.; Dayton and Springfield into Columbus. The total distance was 1,961 miles, but my wife and I had covered a little over 5,200 miles on the same machine before starting the trip."

BARIBEAU CANADIAN CHAMP.

Winnipeg Rider, Mounting an Indian, Took Four Out of Five Championship Races at Hamilton.

ANYTHING in the way of motorcycle racing that had ever been seen in Canada was far excelled at the first annual championships of the Canadian Motorcyclists' Association, held at Hamilton, Ontario, on Monday, July 1, before 4,000 excited spectators.

The coveted title of Canadian champion was captured by Joe Baribeau, the Indian rider, of Winnipeg, who fought his way to the front in four out of the five championship events on the card, in spite of the greatest opposition, which included Don Klark, of Detroit, and Don Johns, of Los Angeles. Baribeau created a sensation when, driving his trusty mount like a man of steel, he began to ride away with title after title, accomplishing his greatest triumph in the feature twenty-five-mile grind, in which he overcame a three-mile lead possessed by Don Johns and won out in record time.

Klark took the only other trade rider event on the program, the five-mile 30.50 race, in which he straddled a four-valve Indian machine. Klark also found some consolation, however, by taking Johns' measure in a special ten-mile invitation race. He proved far too strong for the Excelsior expert, who suffered all kinds of ill-luck in the way of carburetor trouble, and won in 8:55, or at the rate of 67 miles per hour. The previous Canadian record for the distance was three minutes slower, but the former mark was registered on the half-mile dirt oval at Toronto.

Baribeau's time in the 25-mile grind was 27:10, which bettered Harold Cole's recognized record for the distance, made on a half-mile track, by almost four minutes. The times of the races were exceptionally good, considering the condition of the track which was five inches deep in dust and sand

on the corners. There were many spectacular skids, but no spills.

Dan Davis, an Indian rider of Toronto, captured two of the private owners' championship events. A five-mile belt drive race went to N. Newport, of Toronto, who was the only English rider to score, the machine being an English Triumph. Bob Scott, Indian, of Toronto, was the winner in the five mile 4 h. chain drive contest.

Harold Cole, Toronto's daring young Excelsior racer, did not start in a single race, having broken his machine before the meet. Summaries:

Five miles, 61 cu. in. class, private owners, stock.—Won by Dan Davis, Toronto; second, O. Murray, Hamilton; third, Rutledge, Toronto; all Indians. Time, 5:38 1/5.

Ten miles, 54 cu. in. class, open championship.—Won by Joe Baribeau, Winnipeg; second, Don Klark, Detroit; third, Frank Kerr, Toronto; all Indians. Time, 10:04.

Five miles, 61 cu. in. class, open championship.—Won by Baribeau, Winnipeg; second, Frank Kerr, Toronto; both Indians. Don Johns, Excelsior, did not finish. Time, 4:34.

Five miles, 30.50 cu. in. class, private owners, chain drive.—Won by R. Scott, Toronto; second, Tom McGee, Toronto; third, Stellaway, Binbrook; all Indians. Time, 6:08 3/5.

Ten miles, 61 cu. in. class, open championship.—Won by Joseph Baribeau, Winnipeg, Indian; second, Don Johns, Los Angeles, Excelsior; third, Don Klark, Detroit, Indian. Time, 9:13.

Five miles, 30.50 class, open championship.—Won by Don Klark, Detroit; second, Joe Baribeau, Winnipeg; third, Frank Kerr, Toronto; all Indians. Time, 5:24 2/5.

Ten miles, 61 cu. in. class, private owners.—Dan Davis, Toronto; O. Murray, Hamilton; Warwick, Toronto; all Indians. Time, 11:02 1/5.

Ten miles, invitation.—Won by Don Klark, Detroit, Indian; second, Don Johns, Excelsior. Time, 8:55.

Five miles, 30.50 class, private owners, belt drive.—N. Newport, Toronto, Triumph; second, T. Smith, Toronto, Reading Standard; third, Hoar, Toronto. Time, 6:36 2/5.

Twenty-five miles.—Won by Baribeau; second, Don Johns; third, O. Murray, Hamilton. Time, 27:10.

SEEKING FIRST PLACE.

WASHINGTON, D. C.—The National Capital Motorcycle Club, which now claims to be the second largest club in point of numbers affiliated with the Federation of American Motorcyclists, hopes to take first place before the end of the year, and a campaign for membership is on. The club is in excellent financial shape, having approximately \$500 in the treasury. It has in prospect a number of "stunts" which it plans to pull off within the next few months. A hill climbing test will be held within the next few weeks, but the details have not yet been entirely worked out.

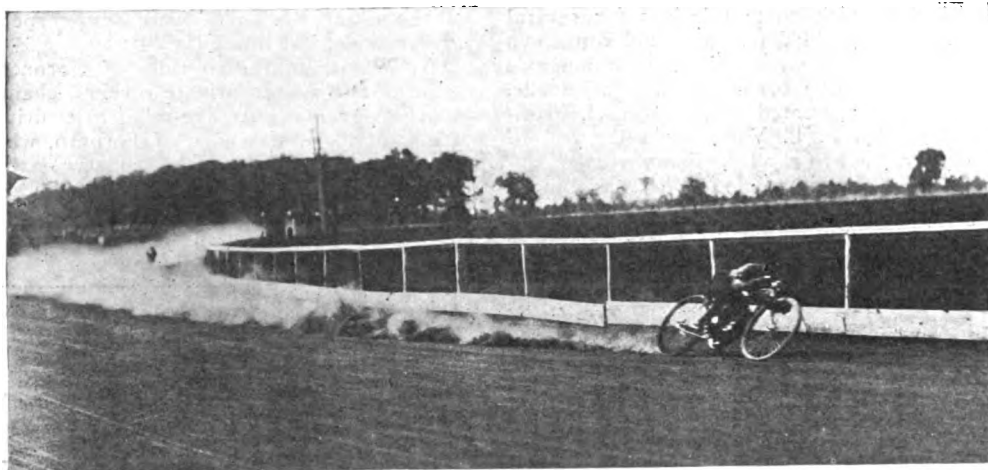
FATAL SPILL AT SAN JOSE.

SAN JOSE, Cal.—Reed Orr, of Sacramento, and W. F. Baker, of this city, sustained fatal injuries in a spill on the track at the San Jose Driving Park on June 30. The men were competing in a motorcycle race which had worked the spectators to a high pitch of enthusiasm, when the crash came. C. D. Reade and E. A. House, two riders well known in this vicinity, also went down in the spill and were seriously hurt.

RECORDS ARE OFFICIAL.

CHAIRMAN THORNLEY, of the F. A. M. competition committee, has received all the affidavits concerning the record trials made on the Playa del Rey (Cal.) saucer on May 17 and May 24 by Ray Seymour and Lon Claffin, in the pro and amateur classes, respectively, and announces that he has formally accepted the records.

THE Leavenworth, Kans., Motorcycle Club is intending to co-operate with the Motor and Good Roads Association in that city with a view of furthering road improvements.



THE F. A. M. HOUR CHAMPIONSHIP RACE

The photograph to the left shows Don Klark on one of the turns.

Below, reading from left to right, are E. G. Baker, who took third place; J. U. Constant, the winner, and Don Klark, who was second.

HOPES FOR MILE IN 30 FLAT.

"I EXPECT to see a mile turned off in 36 seconds flat on the new Columbus motordrome," said Ray Seymour in a recent conversation with S. A. Falor, sales manager of the motorcycle tire department of the Goodyear Tire & Rubber Company. "I am not prepared to advance an opinion as to what will be the limit of speed on a motorcycle, but I feel that if I had an opportunity to pilot my machine over the straightaway track at Daytona, Fla., I could lower the time for the mile to 30 seconds." Seymour conferred with Goodyear experts while in Akron and offered some practical suggestions as the result of recent observations concerning racing tires.



WARD AND WHITTTLER THRILL FANS

Big Crowds at Salt Lake City Saucer See Old Rivals in Tight Finishes—Ward Lowers the Wandamere Record.

SALT LAKE CITY, June 14.—The large crowd of spectators at the Wandamere Motordrome last night was given a real treat. The star of the program was Al Ward, who took first money in every event he entered. In the third race Ward established a new record for the Wandamere track at three miles, covering the distance in 2:08½. The best race of the meet was the six-mile, Class A professional. The five riders who started made a good get-away. Peck immediately took the jump. Before he had gone a lap, however, Ward took the lead and Whittler swung in behind him, with Peck, Brodbeck and Bernstrom following in the order named. This order was maintained until the seventh lap when Bernstrom's machine went bad and he quit the race. On the ninth lap Whittler passed Ward, and it looked as if he was going to win. While everybody was watching these two, Peck and Brodbeck succeeded in making things interesting by passing the leaders. This advantage did not last long, however, and as soon as Whittler and Ward again took the lead, Ward, with a lap and a half to go, shot around Whittler and won by three lengths. Brodbeck won third from Peck by about a foot, both men finishing twenty yards behind Whittler.

The seventh event was a team pursuit

race between the engineer team, composed of Duckworth and Ben Johnson, and the firemen team, Hitchcock and O. Johnson. The teams were started on opposite sides of the track and for several laps they kept a half lap apart. Soon, however, O. Johnson began to work up on his opponents and it looked as if the firemen would make quick work of the engineers. At this juncture, Hitchcock's machine went to the bad and he dropped out, leaving all the work for Johnson. Johnson kept after the engineers and finally overtook both of them, covering a distance of four miles and half a lap. Summaries:

First heat of three-mile Class B, professional—O. Johnson (Indian), first; Duckworth (Indian), second; Ben Johnson (Indian), third. Time, 2:26.

Second heat of three-mile Class B, professional—McNeil (Indian), first; Bernstrom (Indian), second; McCall (Indian), third. Time, 2:17½.

Three-mile Class A, professional—A. Ward (Indian), first; Whittler (Merkel), second; Brodbeck (Merkel), third; Peck (Excelsior), fourth. Time, 2:08½.

Final, three-mile Class B, professional—McNeil (Indian), first; O. Johnson (Indian), second; Bernstrom (Indian), third. Time, 2:25½.

First heat, Class A, professional—Ward (Indian), first; Brodbeck (Merkel), second; McNeil (Indian), third. Time, 2:13½.

Second heat, Class A, professional—Whittler (Merkel), first; Peck (Excelsior), second; Bernstrom (Indian), third. Time, 2:13½.

Team pursuit race, firemen team composed of O. Johnson (Indian), and Hitchcock (Indian), won. Distance, four miles and one-half lap. Time, 3:21.

Final, six-mile Class A, professional—Ward (Indian), first; Whittler (Merkel), second; Brodbeck (Merkel), third. Time, 4:24½.

SALT LAKE CITY, June 21.—The races at Wandamere last night resulted in victories for both Ward and Whittler in the professional Class A. The five-mile Class A professional was won by Ward after a hard fight. Ward led most of the time, as Whittler refused to take the lead. Peck and Brodbeck jockeyed some, but the fight was between Ward and Whittler. With Ward in the lead one lap from the tape, Whittler endeavored to go around him, but he was unable to do so.

In the eight-mile Class A professional, Ward and Whittler again fought for supremacy. Ward got a bad start as he was on the running board regulating his machine when the race was started. Brodbeck got a big jump, and it was several laps before Ward was able to catch him. About four laps from the finish Ward's machine was seen to slow down and Whittler passed him. Summaries:

First heat, two-mile match race—McNeil (Indian), first; Bernstrom (Indian), second. Time, 1:31½.

Second heat—McNeil, first; Bernstrom, second. Time, 2:08.

First heat, five-mile Class B, professional; two-miles—McCall (Indian), first; O. Johnson (Indian), second; Duckworth (Indian), third. Time, 1:34.

Second heat, Class B, professional—McNeil (Indian), first; Hitchcock (Indian), second; Johnson (Indian), third. Time, 1:39.

Five-mile Class A, professional—Ward (Indian), first; Whittler (Merkel), second; Brodbeck (Merkel), third. Time, 3:36½.

Final, five-mile Class B, professional—McNeil (Indian), first; O. Johnson (Indian), second; Duckworth (Indian), third. Time, 3:39½.

Three-mile invitation Class B—Ben Johnson (Indian), first; Bernstrom (Indian), second; Duckworth (Indian), third. Time, 2:29.

Eight-mile Class A, professional—Whittler (Merkel), first; Brodbeck (Merkel), second; Peck (Excelsior), third. Time, 5:47½.

RODE ON BARE RIM

Washington Speedster Blew Front Tire in Baltimore Race, but Scored a Spectacular Victory.

BALTIMORE, Md.—One of the most thrilling motorcycle races ever pulled off in this vicinity was held in connection with an automobile meet at Laurel, Md., on June 29. The spectators were treated to something decidedly out the ordinary in a match race between Thomas Dedge, of Washington, D. C., and McPherson. Dedge got the jump on McPherson at the crack of the pistol and continued to gain for five laps. Then his front tire blew out, almost causing him to collide with a fence. At the time Dedge was leading his rival by three-quarters of a mile.

Instead of changing wheels, as he had a chance to do, the Capital boy deliberately cut the casing from his front wheel and started after his opponent, who had passed him and was leading by half a mile. The pursuit continued and Dedge crept closer and closer to his opponent. The big crowds cheered him as he swayed around the track. His determination not to be handicapped by the absence of a front tire finally won out, and amid great excitement he passed his rival and came under the wire the victor.

The meet was held on two days and there were two motorcycle events each afternoon. Freddie Tiemeyer, of this city, easily won the two races on Friday, with Clayton Sandruck, also of Baltimore, in the running. Dedge beat out Tiemeyer in the first race on Saturday, before he ran his thrilling match race. Summaries:

Friday—First race, three miles, open, 30.50 machines—Freddie Tiemeyer, Indian, first; Thomas Dedge, Indian, second; Clayton Sandruck, Excelsior, third. Time, 3:39.

Second race, five miles, open, 61 ins. displacement—Freddie Tiemeyer, Indian, first; Clayton Sandruck, Merkel, second; Alvin Day, Indian, third. Time, 5:27.

Saturday—First race, five miles, 61 ins. displacement—Thomas Dedge, Indian, first; Freddie Tiemeyer, Indian, second; Clayton Sandruck, Merkel, third. Time, 5:12½.

Second race, 10-mile match race, 61 ins. displacement—Thomas Dedge, Indian, first; McPherson, Excelsior, second.

AN OHIO RACE MEET.

ONE THOUSAND race followers witnessed spirited motorcycle events at New Boston, a suburb of Portsmouth, Ohio, on June 23, when a program was arranged by Tide Davenport, Indian agent in Portsmouth. The races were run under an F. A. M. sanction, P. R. Brehmer, of Zanesville, acting as referee. Summaries:

Three miles, open—Williams (Indian), first; Tullis (Thor), second; Brunton (Indian), third. Time, 4:25.

Five miles, open—Tullis (Indian), first; Williams (Indian), second; Brunton, in third place, retired by accident. Time, 6:15.

Five miles, for Portsmouth club members only—



Thomas Dedge.

Ray Starlin, first; George Keilman, second; Karl Gims, third. Time, 7:08 1-5.

Ten miles, open—Tullis (Thor 4), first; Williams (Indian), second; Nourot, third. Time, 13:04.

Pursuit race, open—Tullis and Williams eliminated the other contestants in fifth mile; in eighth mile Williams broke a chain, thus giving the event to Tullis, who had been slowly gaining.

Twenty miles, open—Tullis broke a valve in ninth mile when in the lead, leaving Williams to win easily. Nourot in second place. Time, 26:09.

FIELD DAY RACES

BROOKLYN, N. Y.—John U. Constant lowered his one-mile track record at Brighton Beach on June 26 by traveling the route in 52½ seconds, 3¼ seconds faster than his best previous time. The exhibition was given in connection with the annual field day program of Brooklyn Lodge No. 22, B. P. O. Elks, at the Brighton Beach track. Over 8,000 spectators were on hand. J. B. French, Frank Baker and Constant gave a thrilling exhibition in a 10-mile event, the latter winning by a small margin over French. Time, 10 minutes 3 seconds.

READING ENDURANCE RUN.

ANNOUNCEMENT is made that the reliability run of the Reading (Pa.) M. C., which was postponed from Sunday, June 16, because of inclement weather, will be held on Sunday, July 14, regardless of weather conditions. At latest reports thirty riders had entered, and the club officials look forward to a highly successful event. There will be a prize for every perfect scorer. Among those who are prominent in boosting plans for the run is James Mayo, Flying Merkel agent in Reading.

TIEMEYER HURT IN SPILL

Baltimore Rider Figured in Crash During July 4 Races on Bennings Track.

WASHINGTON, D. C.—The motorcycle races held at the Bennings track on July 4, under the auspices of the Central Labor Union, were successful from a standpoint of speed and the interest manifested by motorcyclists, but the crowd was not what was expected. The races were marred by an accident in the second event, a five-mile open contest. M. Tiemeyer, of Baltimore, and William Fuerstine, of Norfolk, were in a neck-and-neck race on the fourth lap when the carburetor on Fuerstine's machine became loose and, in reaching over to adjust it, he caught the spark plug by mistake. He sustained an electric shock, temporarily losing control, and his machine began wobbling. Both Tiemeyer and Fuerstine were confused and their machines collided. Tiemeyer was thrown from his machine, sustaining bruises which necessitated his being taken home. Fuerstine continued in the race.

The first race, a three-mile novice, went to Bernard Sherwood, on a Harley-Davidson. His time was 4:38. Oscar Thorne, on a Haverford, was second. In the second event, the five-mile open, the Fuerstine-Tiemeyer spill enabled Tom Dedge, Indian, to win. He was the only one of six entrants to finish. Fuerstine, on an Indian, won a hard-earned victory over J. Dodge in the third event, a five-mile open, in 5:46. Fuerstine also won the 10-mile handicap on his Indian in 11:51.

TWO MOTORCYCLE EVENTS.

TWO motorcycle races were staged in connection with an automobile race program, held in Toledo, Ohio, on Saturday, June 15, one event at two miles and the other at five. In the former W. H. Bailey (Excelsior) was in first place; M. Garbner (Yale), second, and Herbert Gretzler (Yale), third. Time, 3:07. O. J. Oberwenger won the five-mile event on an Excelsior machine; A. G. Happ (Thor) was in second place, and William S. Bailey (Excelsior), in third position. Time, 7:00. A. B. Coffman, of the Consolidated Manufacturing Company, acted as referee.

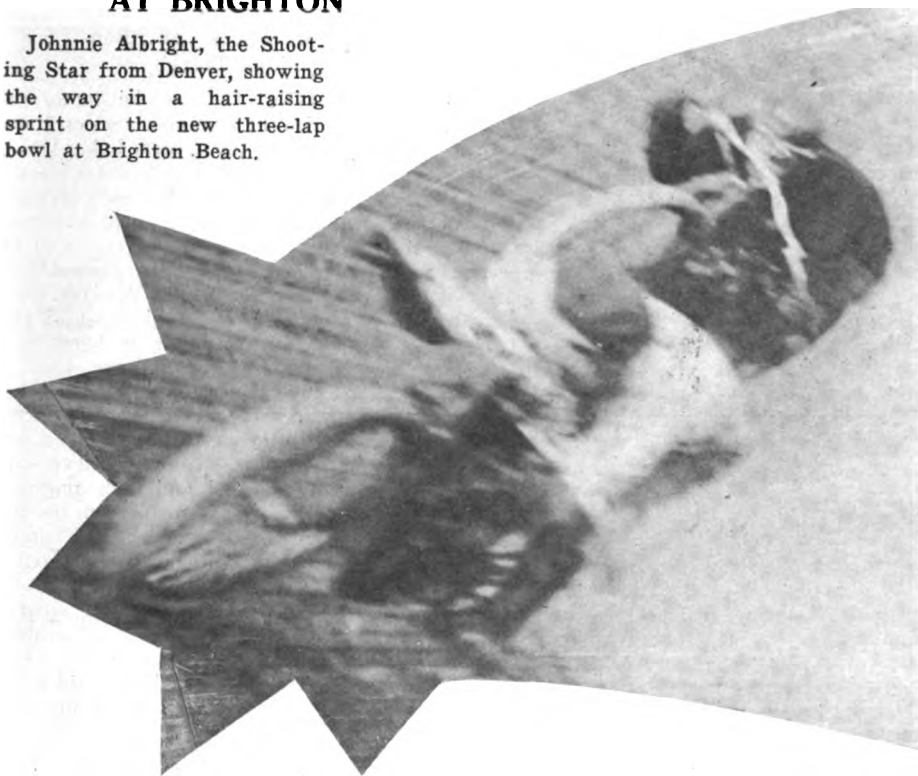
A COMBINATION MEET.

WASHINGTON, D. C.—Two motorcycle events were featured in the automobile meet at Laurel, Md., June 28, at which Bob Burman lowered two automobile records for the State of Maryland. The first of the motorcycle events, three miles, open, for 30.50 machines, was won by Fred Tiemeyer, Indian, with Thomas Dedge, Indian, second, and Clayton Sandruck, Excelsior, third. Time, 3:39. The second event, five miles, open, 61.00 machines, went to Fred Tiemeyer, on an Indian; Clayton Sandruck, Merkel, was second, and Alvin Day, Indian, third. Time, 5:27.



WITH THE COMET SQUAD AT BRIGHTON

Johnnie Albright, the Shooting Star from Denver, showing the way in a hair-raising sprint on the new three-lap bowl at Brighton Beach.



OLYMPIC WINNER.

ALFRED LANE, of New York City, amateur champion pistol and revolver shot of America and holder of a number of international championships, is an ardent motorcyclist. He has been riding two-wheelers for over eight years, and this summer missed his usual tour of three weeks through the Adirondacks and Maine woods. The reason why his pet mount, an 8 h. M. M. twin, is stored away at present is that Lane is in Stockholm on the American pistol team, where he recently made the highest scores in the Olympic revolver and pistol championship matches.

REFUSE A SANCTION.

AT the first meeting of the members of the Competition Committee of the Canadian Motorcyclists' Association, held at Toronto on Saturday, July 6, it was decided to refuse a sanction for motorcycle races in Montreal on August 10-11. The applicant, R. M. Jaffray, is a private promoter, and the association intends to give the preference to real club competition.

F. A. O. Johnston, president of the Toronto M. C., was unanimously selected as chairman of the committee for the ensuing term.

SAVED LIFE OF TOT.

ANOTHER life has been saved by the efficiency and speed of the trusty motorcycle. Little Dorothy Bilton, a three-year-old tot, accidentally fell into a boiler of boiling water at her home at 20 Huron street, Toronto, and was frightfully scalded. Her father, who is a member of the Toronto Motorcycle Club, picked her up and, mounting his Flying Merkel motorcycle, rushed her to the Sick Children's Hospital with all speed, where she received immediate medical attention.

A JINX AT TORONTO

Rain, Breakdowns and Spills Worry Promoters and Riders at a Well-Attended Race Meet.

TORONTO, CAN.—A jinx of dire hue was very much in evidence at the second big race meet of the season, staged by the Toronto Motorcycle Club at the Exhibition half-mile dirt track on Saturday, July 6. To begin with, a terrific thunder storm spoiled a motorcycle parade which had been planned for the night before the meet. At the meet itself, the green-eyed fiend bore down upon a number of the riders, watching Joe Baribeau, the new Canadian champion, with particular care, causing punctures, mechanical trouble and the like, finally bringing about a big spill in the last event, in which practically the whole race went down in a heap.

Competition of the hall-marked variety was provided for the 2,000 spectators, however, and the unfortunate features only served to intensify the interest, if that were possible. A great array of talent was on hand for the occasion, and honors were fairly distributed, although the hard luck which followed Baribeau prevented him from securing more than a lone second prize. In two races, the Winnipeg blew tires; in a third, he broke his magneto control and he was unable to finish at all in his fourth start on account of a skid.

Shorty Matthews, with his single cylinder white Thor, carried off two good wins and registered second place behind Cole in a third race. Cole cracked his single cylinder Excelsior racing machine in practice before the meet and was unable to start except in the twin-cylinder contests, both of which he won easily. Cole never rode better in his life, his work on

the corners being of the gilt-edge variety. He never skidded an inch and performed like a master. He was blamed by a few for the tumble in the last race, but the judge at the corner where the accident took place, freed him from all blame.

In the ten-mile single cylinder open event, Baribeau and Matthews, the Chicago crack, were fighting it out, when Baribeau took three spectacular skids, blowing his tire. It was then quick work for Matthews to come home. The Canadian champion and Cole began to fight it out in the ten-mile open race when Baribeau again sprung a leak and had to quit. In the unknown distance race, which turned out to be a ten-mile affair, Baribeau was dueling it with Matthews when his machinery went wrong and he became a trailer. Then in the twenty-mile contest, three of the riders spilled on the first turn but no one was seriously hurt. The race was stopped and a change was made to a five-mile event, which Cole captured easily, with Baribeau out of it.

Among the features of the occasion was Amoss' victory in the side-car race, in which he came from fourth position and won out in a sensational stretch drive. Amoss piloted a Rudge-Whitworth. This race provided great amusement for the crowd. A fine race was also provided in the ten-mile chain drive event for private owners. Scott ran away with first place, but Phillips on a 2½ Indian and Miles on a 4 h. Indian, fought on even terms for mile after mile for second place, Phillips, who is only a boy, finally outdistancing his rival, Newport, on a Triumph, suffered his first defeat of the season when Scott took his measure.

Summaries:

Ten miles, 30.50 class, belt, private owners' stock. — Won by N. Newport, Triumph; second, P. Barnes, Triumph; third, A. F. Astley, Triumph. Time, 13:58½.

Ten miles, single cylinder, open.—Won by Shorty Matthews, Thor; second, R. Barton, R. W.; third, G. Magee, Indian. Time, 12:18 4/5.

Ten miles, 30.50 class, chain, private owners' stock.—R. D. Scott, Indian; second, W. Phillips, Indian; third, F. W. Miles, Indian. Time, 14:02.

Ten miles, 55 cu. in. class, open.—Won by Harold Cole, Excelsior; second, Charlie Orr, Indian; third, R. Barton, R. H. Time, 12:16 3/5.

Five-mile side-car race.—Won by M. E. Amoss, Rudge-Whitworth; second, Percy Barnes, Triumph; third, A. F. Astley, Triumph. Time, 8:49.

Unknown distance race (ten miles).—Won by Shorty Matthews, Thor; second, Joe Baribeau, Indian; third, R. Barton, R. H. Time, 12:30 3/5.

Ten miles, 30.50 class, private owners' stock, T. T. models allowed.—Won by R. D. Scott, Indian; second, N. Newport, Triumph; third, A. F. Astley, Triumph. Time, 13:45 1/5.

Consolation race, five miles, 30.50 class.—Won by Charlie Orr, Indian; second, Walter Andrews, Indian; third, A. A. ussell, R. W. Time, 6:53.

Five miles open.—Won by Harold Cole, Excelsior; second, Shorty Matthews, Thor; third, R. Barton, R. W. Time, 6:17 3/4.

SMILEY A HUMAN COMET

With Machine in Flames, He Whirls Around Cleveland Track at Eighty Miles an Hour.

CLEVELAND, Ohio.—A feature unannounced beforehand was added to the program of thrilling and close motorcycle races at the Stadium tonight, when Russell Smiley whirled around the saucer track at an 80-mile an hour clip in flames. A broken gasoline feed pipe caused him to leave a trail of flaming gasoline in the wake of his machine. He came to a stop by turning his machine off the track into the sand, and the blaze was put out by the use of chemical extinguishers. Smiley was not burned, al-

though his machine was put out of commission. Standen made a run-away of the match race between himself and Huttering, the latter's machine not working right. Knapp won the three-mile invitation professional race, but not until after a seesawing affair with Gibson for twelve laps. Summaries:

Three miles, amateur.—Roehl, first; Henikman, second; Norton, third. Time, 2:48.

Two-mile professional match race.—First heat, won by Standen; Huttering, second; time, 1:35. Second heat, won by Standen; Huttering, second; time, 1:30 3/4.

Three-mile invitation, professional.—Won by Knapp; Gibson, second; Seliga, third. Time, 2:13 3/4.

Eight-mile, free-for-all.—First heat, won by Smiley; Gibson, second; Seliga, third; time, 1:30 3/4. Second heat, won by Knapp; Standen, second; Huttering, third; time, 1:30 3/4. Final heat, won by Gibson; Knapp, second; Smiley, third; time, 6:02.

BRIGHTON PROGRAMS DRAW BIG CROWDS

Albright, Chapple, Cox, Klebes and Constant Supply Thrills on New Bowl and a Few Falls Enliven the Speed Sessions—Sensational Riding in a Heavy Fog.

BROOKLYN, N. Y., July 8.—The riders at the new Brighton Motordrome took big chances on Sunday evening. A heavy fog rolled in from the ocean, blanketing the track and making the riders almost indistinguishable at one hundred yards. Like gaunt shadows, with fire spitting from the engines, the riders would suddenly loom up out of the mist and in an instant they would be swallowed up in the fog on the backstretch.

Arthur Chapple and Johnnie Cox featured in their respective races. Chapple won his match race with H. H. Thomas, of Philadelphia, in straight heats. Cox, on his J. A. P. machine, romped home an easy winner in the first heat of the five-mile professional race. In the second heat the oil pipe connection to the front cylinder broke and he finished third. In the final heat, Billy Wray borrowed John Constant's machine and Cox used Wray's motor. Much to Wray's surprise Cox beat him out very handily. This race was cut to three miles due to the heavy fog.

Charlie Davis had a sensational spill on the eleventh lap of the professional race. Riding low, his pedal caught on the boards and he was thrown, sliding a distance of a hundred feet before he stopped. Neither rider or machine were injured.

The track was very wet and slippery and goggles were useless as they "fogged," making it difficult for the riders to see.

Sunday night's summaries: Mile time trial, by John U. Constant. Time, 46 seconds.

Three-mile time trial, by Arthur Chapple. Time, 2:06 3/4.

Five-mile professional race.—First heat won by John Cox, J.A.P.; second, Wm. Wray; Indian; third, Chas. Davis, Indian (out on 11th lap). Second heat won by W. Wray, Indian; second, Chas. Davis, Indian; third, John Cox, J.A.P. Time, 4:00 3/4. Final heat (distance cut to three miles), won by John Cox, Indian; second, Chas. Davis, Indian; third, W. Wray, Indian. Time, 2:19.

Five-mile match race between Chapple and H. H. Thomas.—First heat won by Chapple, Indian; time, 2:14 3/4. Second heat won by Chapple, Indian; time, 2:14 3/4.

Handicap professional three-mile race, won by John Cox, Indian (scratch); second Wm. Wray, Indian (200 yards); third, Chas. Davis, Indian (200 yards).

BROOKLYN, N. Y., July 8.—Saturday's racing at the Brighton Motordrome was productive of a series of spills and some sensational riding. In the exhibition races of the matinee performances, Johnnie Constant blew a front tire while racing around the backstretch. He was thrown headlong over the machine and received many bruises. Johnny Albright, the Denver flier, also blew a tire,

but was able to control his machine and escape injury. In the deciding heat of the four-mile amateur race of the evening, J. French in attempting to climb the track fell and rolled to the bottom and Constant, who was close behind French when he fell, leaped from his machine as he was about to crash into French's mount. Both riders escaped with a few scratches, but the machines were put out of commission and the race was declared off.

In the championship five-mile races Johnny Albright defeated "Speedy" Vanderbery, of Philadelphia, in straight heats. In the second heat, the oil supply in Vanderbery's machine ran low and he was forced to quit in the fourth mile. The five-mile professional race furnished the closest finish yet seen on this track. In the first heat Chas. Davis and John Cox were so close together it was almost impossible to determine the winner. Davis was awarded the race, the judges stating that he was inches ahead. In the second heat Cox made sure of winning by riding four laps too far. In the final heat Wm. Wray had a miraculous escape from serious injury. In the fourth mile, while nearing the grandstand, he was seen to swerve against Davis, just grazing that rider's machine. His handle bar had cracked close up to the steering head and he had difficulty in controlling his machine. He finished the heat with one hand on the bar.

Saturday night's summaries: Special amateur four-mile handicap race.—First heat, won by J. French, Indian (2 laps); second, John Constant, Indian (scratch); time, 3:11 3/4. Second heat, won by John Constant, Indian; second, J. French, Indian; time, 3:06 3/4. Third heat, French fell and race was declared off.

One-mile time trial by Johnnie Albright, Denver; time, 43 3/4 seconds.

Five mile professional race.—First heat, won by Chas. Davis, Indian; second, John Cox, J.A.P.; third, W. Wray, Indian; time, 3:54 3/4. Second heat, won by John Cox, J.A.P.; second, Chas. Davis, Indian; third, W. Wray, Indian; time, 3:50. Final heat, won by John Cox, J.A.P.; second, Chas. Davis, Indian; third, W. Wray, Indian; time, 3:44 3/4.

Five-mile match race between Johnnie Albright and Wm. Vanderbery.—First heat, won by Albright; time, 3:46 3/4. Second heat, won by Albright; time, 3:45 3/4.

Five-mile professional handicap race.—Won by Wm. Wray, Indian (1 lap); second, John Cox, J.A.P. (scratch). Time, 3:58 3/4.

SATURDAY, June 29.—At the inauguration meet of the Brighton Stadium, at Brighton Beach, New Yorkers witnessed their first motorcycle speed exhibitions on a board track. All the crack riders of the East and Johnnie Albright, the Denver flier, participated in the events of the evening.

From the crack of the pistol in the first event to the final number on the program, the great crowd of spectators was treated to a series of thrills.

Summaries: Amateur, four miles.—First heat, Frank Zimmerman in lead; Lyons fell; race called off. Second heat, won by John Constant; second, Billy Annis; time, 3:45 3/4. Final heat, won by John Constant; second, Frank Zimmerman; time, 3:48 3/4.

Professional, five miles.—First heat, won by John Cox; second, Billy Wray; time, 4:06 3/4. Second heat, won by Charlie Davis; second, Ferdie Mercier; time, 4:20 3/4. Final heat, won by John Cox; second, Billy Wray; time, 4:07.

Professional championship, match series, at three miles.—First heat, won by Arthur Chapple; time, 2:12 3/4. Second heat, won by Johnnie Albright; time, 2:06 3/4. Final, won by Arthur Chapple; time, 2:36 3/4.

Handicap professional race at four miles.—Scratch, John Cox; 15 yards, Ferdie Mercier; 20 yards, Charlie Davis; 1 lap, Billy Wray. Won by Mercier; second, Davis. Time, 3:26 3/4.

Two-mile time trial by Johnnie Albright; 1:21 1/4.

One-mile time trial by Arthur Chapple; 41 seconds.

All the men rode Indian machines with the exception of Cox, who rode a Baxter J. A. P. machine.

BROOKLYN, N. Y.—Johnnie Albright, the Denver flier, continued his sensational riding at Brighton Stadium Motordrome on Sunday, June 30, by winning from Harry Klebes, of Philadelphia, in the three-mile professional championship race series. In the first heat the men traveled over the greater part of the distance abreast of each other, Albright finally gaining a machine length and crossing the finish line in 2:19 3/4. In the second heat Klebes set out to show his heels to Albright, but the Denver boy was too swift for him. Albright won by a comfortable margin.

The final heat of the professional five-mile race proved the most exciting one of the evening. Davis, Mercier and Cox qualified. Mercier led at the start, with Cox a close second, Davis gradually falling behind. At the end of the fourth mile Mercier and Cox were abreast with Davis, three quarters of a lap in the rear.

All the interest in the race was centered on Mercier and Cox, Mercier riding a 7 h. Indian and Cox a British J. A. P. machine. Davis was considered out of the running when suddenly he was seen to speed up and in a sensational sprint he gradually cut down the distance between himself and the other two riders. As the flag for the last lap was dropped he suddenly shot up to the top of the track and passed Cox. In the last 200 yards he caught Mercier and won with yards to spare.



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But it has not been these men alone—not the knowledge gained by the few—that has made Diamond tires supreme. Ten thousand actual users have loaned their

knowledge. Every problem they encountered they told us of and offered a solution.

With this vast store of facts gathered from every section of the country during a period of 14 years, at their command, our engineers designed Diamond Motorcycle tires.

Endurance was not sacrificed for resiliency, or either for speed. The maximum of each was their aim.

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ON NEW COLUMBUS BOWL

Records Fall When Seymour and Hasha Star at Opening Meets on July Fourth.

COLUMBUS, Ohio.—More than 27,000 fans attended the race meets held July 4 on the new board track. Records were smashed in almost every event, and the track is pronounced the fastest in the world. Not a serious accident marred the events of the afternoon and evening.

Records were lowered by Raymond Seymour, of Los Angeles, and Eddie Hasha, of Dallas, Tex., both of whom rode Indians. In the speed trials made at the close of the regular program in the afternoon both these riders made records of $37\frac{1}{2}$ seconds for the mile, which is the world's record by $\frac{1}{2}$ of a second. Other records lowered were for three miles, four miles and five miles. The marks made at these distances were 1:59 for three miles; 2:33 for four miles, and 3:12 $\frac{1}{2}$ for five miles. The last record was made at the night races.

The liveliest event of the two meets was the match race between Hasha and Seymour, best two in three, at three, four and five miles. Seymour won the first heat in 1:59, while Hasha took the second heat in 2:33. The third heat resulted in a victory for Seymour in 3:13.

The challenge cup championship race for members of the Columbus Motorcycle Club resulted in a victory for George E. Evans, Indian. He covered the five miles in 3:52 $\frac{1}{2}$. L. P. Birkenbach, who had won the cup on the dirt track in the two previous years is compelled to relinquish it to Evans. Summaries:

AFTERNOON MEET.

Five miles, for private owners, 30.50 cu. in.—Don Klark (Indian), first; L. P. Birkenbach (Thor), second; George E. Evans (Indian), third. Time, 4:31 $\frac{1}{2}$.

Five-mile novice, open—J. A. Yates (Indian), first; Joseph Miller (Indian), second; Charles Barker (Thor), third. Time, 4:25.

Match race between Seymour and Hasha; two in three heats; three, four and five miles—First heat, Seymour, 1:59; second heat, Hasha, 2:33; third heat, Seymour, 3:13.

Five miles, 61.00 cu. in.; Columbus M. C. Championship Cup—George E. Evans (Indian), first; L. P. Birkenbach (Indian), second; J. A. Yates (Indian), third. Time, 3:52 $\frac{1}{2}$.

Seven miles, open, 61.00 cu. in.—Don Klark (Indian), first; L. P. Birkenbach (Indian), second; George E. Evans (Indian), third. Time, 5:27 $\frac{1}{2}$.

Five miles, stripped stock, private owners and resident club members, for motordrome challenge cup—H. D. Wooley (Indian), first; J. A. Yates (Indian), second; Charles Barker (Indian), third. Time, 4:23.

Ten-mile professional, open—Don Klark (Indian), first; L. P. Birkenbach (Indian), second; Walter Kussemul (Indian), third. Time, 7:43 $\frac{1}{2}$.

Time trials—Raymond Seymour, one mile in 37 $\frac{1}{2}$; Eddie Hasha, one mile in 37 $\frac{1}{2}$.

EVENING MEET.

Five-mile novice, stock, 30.50 cu. in.—J. A. Yates (Indian), first; Joseph Miller (Indian), second; Charles Barker (Indian), third. Time, 4:17 $\frac{1}{2}$.

Six miles, open, 61.00 cu. in.—Don Klark (Indian), first; L. P. Birkenbach (Indian), second. Time, 4:49.

Five miles, open, 30.50 cu. in.—Don Klark (Indian), first; L. P. Birkenbach (Thor), second. Time, 4:58 $\frac{1}{2}$.

Five miles, stripped stock, 61.00 cu. in., private owners—J. A. Yates (Indian), first; Joseph Miller (Indian), second; Charles Barker (Indian), third. Time, 4:23 $\frac{1}{2}$.

Ten miles, open, 61.00 cu. in.—Don Klark (Indian), first; L. P. Birkenbach (Indian), second; B. B. Dougherman (Indian), third. Time, 7:39.

Five miles, free-for-all—Ray Seymour (Indian), first; Eddie Hasha (Indian), second. Time, 3:12 $\frac{1}{2}$. Average time, 96 miles per hour.

SHAFFER STAR OF MEDINA MEET.

RACES held at Medina, Ohio, in connection with the fair on July 4, attracted a crowd estimated at 12,000. "Bill" Shaffer, of Cleveland, was the big attraction on his Indian, while E. H. Tracy, another Cleveland speedster, gave Shaffer a hard ride in nearly every event, beating the former in the ten mile for singles. Summaries:

Five miles, 30.50, stock.—First, Shaffer, Indian; second, Tracy, Indian. Time 7:43 $\frac{1}{2}$.

Three miles, novice, for 30.50, stock.—First, Gaupard, Indian; second, Schloz, Indian. Time, 5:11.

Ten miles, 30.50 class.—First, Tracy, Indian; second, Schaffer, Indian. Time 15:13 $\frac{1}{2}$.

Five miles, 30.50, stock.—First, Schaffer, Indian; second, Tracy, Indian. Time 7:49 $\frac{1}{2}$.

A RECORD DENT.

WHILE reeling off about 90 miles an hour recently on the Riverview Motordrome in Chicago, Joe Wolters had a sensational spill which left his rear wheel in the condition



shown in the photograph. Joe was not injured, but it goes without saying that the wheel found its way to the junk pile. The tire remained on the rim and was not punctured.

PROTEST AT SAVANNAH.

SAVANNAH, GA.—Over 2,000 fans witnessed the races held under the auspices of the Savannah M. C. on July 4. The first event of the day was for singles. A battery Thor made the two laps of six and a half miles in 16:39, or at the rate of 46 miles an hour, and Steve Harris, Indian agent in Savannah, protested the race. The engine was taken down later and found to be a stock model. Summaries:

Event No. 1, for singles—First, George Cleary (Thor); time, 16:39; second, Hopkins (Indian), 17:03; third, Potts (Merkel), 19:24.

Event No. 2, for twins—First, J. E. Hodge; time, 21:24; second, Mosher (Indian), 21:26.

Event No. 3, for twins—First, John Mosher; time, 23:24; second, Cleary (Thor), 23:59; third, Downing (Merkel), 26:10.

Event No. 4—First, Mosher (Indian); time, 23:27; second, Cleary (Thor); third, Cafiero (Harley-Davidson).

Event No. 5, twins—First, J. E. Hodge; time, 22:20; second, Mott (Excelsior), 30:49.

CLUB HONORS DERKUM.

PAUL J. C. DERKUM, the manager of the Vailsburgh Stadium Motordrome, has been elected an honorary member of the New Jersey Motorcycle Club, of Newark.

ELMIRA SPEED SESSION.

Two Rochester Boys, Bishop and Van Amkirk, Carry off Bulk of Prizes in Big Holiday Meet.

ELMIRA, N. Y.—The main contenders in the Elmira Motorcycle Club's Fourth of July race meet were R. J. Bishop and Ed. Van Amkirk, both of Rochester. Bishop took first in all the main events except one, and in that event he was disqualified for looking over his shoulder to ascertain the position of his competitors. Teasdale, of Elmira, had hard luck all through the races, having two blowouts, one occurring when he was putting up the prettiest race of the day. Peters, of Elmira, while riding in the sixth event, fouled Teasdale, and his race was protested. The summaries:

Event No. 1, three-mile novice, 30.50 cu. in., stripped stock—First, Harry Burgess, Elmira; second, T. Sayles, Elmira; third, W. Mahoney. Time, 5:02.

Event No. 2, ten-mile open, 50.00 cu. in., stripped stock—First, R. J. Bishop, Rochester; second, Charles Teasdale, Elmira; third, Leon Peters, Elmira. Time, 13:46 $\frac{1}{2}$.

Event No. 3, five-mile, private owner, 30.50 cu. in., stripped stock—First, R. J. Bishop, Rochester; second, Edward Van Amkirk, Rochester; third, Charles Teasdale, Elmira. Time, 9:02 $\frac{1}{2}$.

Event No. 4, ten-mile open, miss and out, 50.00 cu. in., stripped stock—Edward Van Amkirk, Rochester, finished alone; R. J. Bishop was disqualified for looking back over his shoulder, and Teasdale, of Elmira, had a tire blow out. Time, 14:41.

Event No. 5, five-mile open, 30.50 cu. in., stripped stock—First, R. J. Bishop, Rochester; second, Edward Van Amkirk, Rochester; third, Charles Teasdale, Elmira.

Event No. 6, ten-mile, private owner, 50.00 cu. in., stripped stock—First, R. J. Bishop, Rochester; second, Peters, Elmira. Time, 14:21 $\frac{1}{2}$. Bishop entered this race under protest as his machine was not a stock model.

Event No. 7, unlimited time, open event, 30.50 cu. in., stripped stock—First, Bishop, Rochester; second, Charles Teasdale, Elmira; third, Edward Van Amkirk, Rochester. Time 7:59 $\frac{1}{2}$.

SURPRISES AT DENVER.

DENVER, COL.—Surprises were the order of the day in the motorcycle races at Tuileries Park on Sunday afternoon July 7. The first came when Ed. Swartz defeated Curly Fredericks in a match race and there was another when Cox slipped past the other riders on the homestretch of the seven-mile open event and won by less than a foot. Cox, by getting two firsts, carried off the honors of the day. In each event, however, he had only inches to spare.

Curley Fredericks was beaten by Swartz in the last fifty feet, due to the breaking of his spark control. Swartz hung on to Fredericks' rear wheel the entire distance and had just jumped out of the pace in the last lap when Fredericks tried to give his machine the rest of the spark, only to find that the control had broken. The match race between Cox and King was the prettiest race of the day with the riders sticking almost elbow to elbow during the entire race. Summaries:

Two miles, amateur, singles, stock, 30.50 class—L. Parkhurst (Merkel); R. Barclay (Merkel). Time, 2:28.

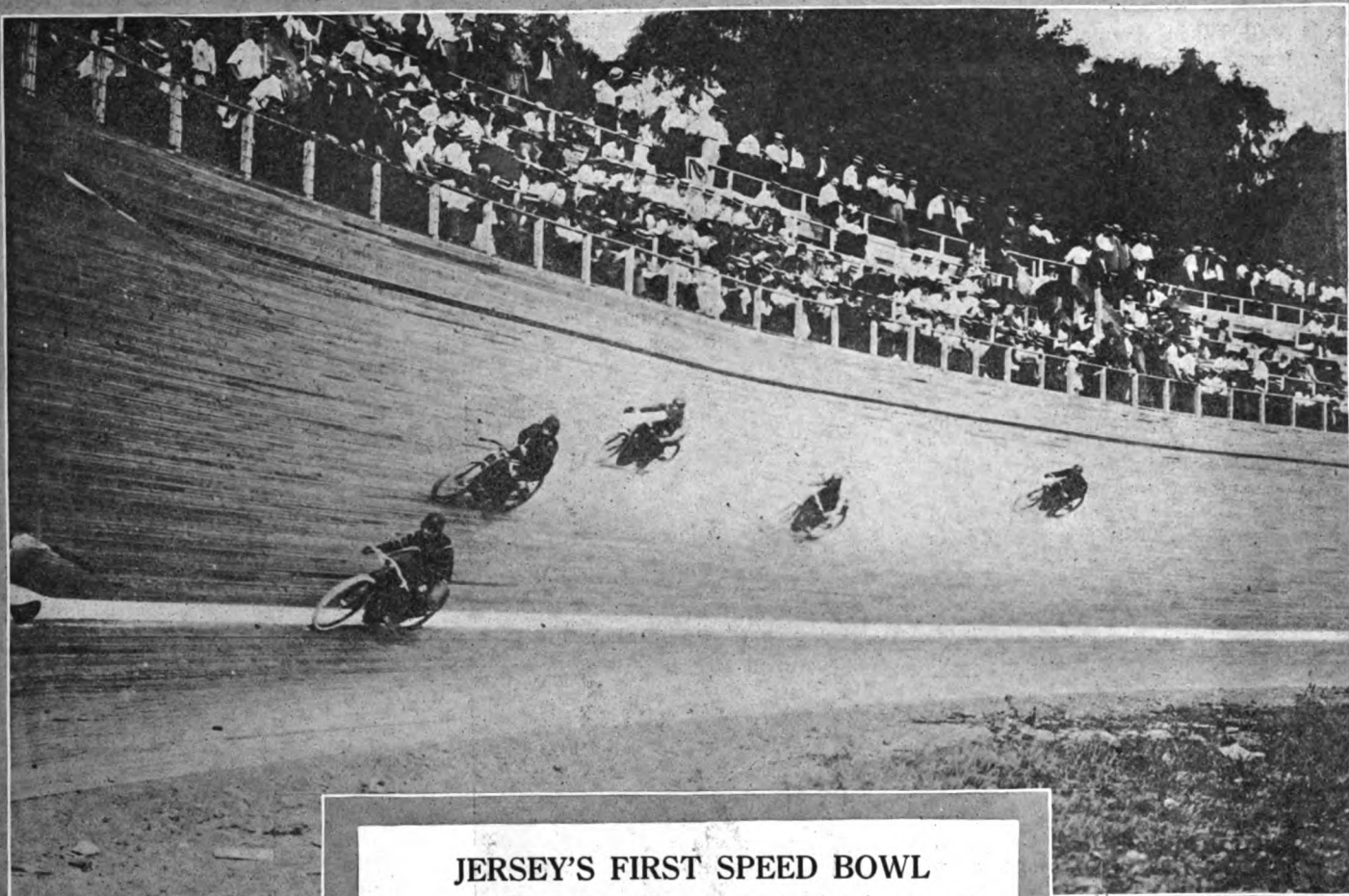
Three miles, open, professional, 61 class—E. Swartz (Indian); M. Fredericks (Excelsior). Time, 2:17 $\frac{1}{2}$.

Match race, 3 miles, professional, 61 class—J. Cox, (Merkel); F. King (Indian). Time, 2:17.

Seven miles, open, professional, 61 class—J. Cox (Merkel); A. Patterson (Merkel); L. Bowen (Merkel). Time, 5:04 $\frac{1}{2}$.

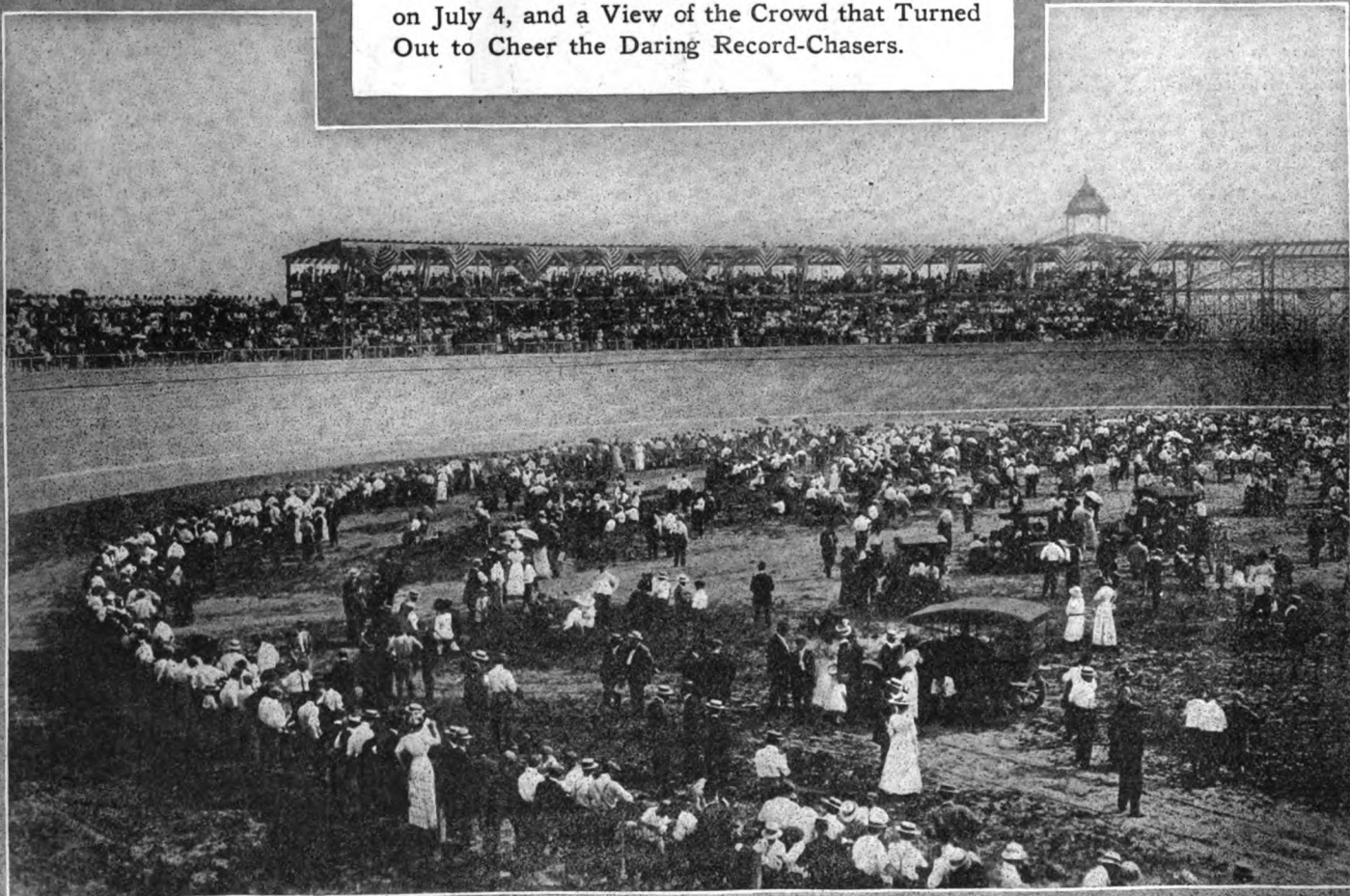
YALE SIDE-CAR CLUB.

THE Yale Side-Car Club has been organized in New York City with the following members: Arthur E. Fisk, John Siemsen, O. W. Fuller, J. O'Brien, Louis Goldsmith and J. Godfrey Haas. Headquarters have been taken at 94 St. Nicholas avenue, New York.



JERSEY'S FIRST SPEED BOWL

An Exciting Finish on Newark Track, Opened on July 4, and a View of the Crowd that Turned Out to Cheer the Daring Record-Chasers.



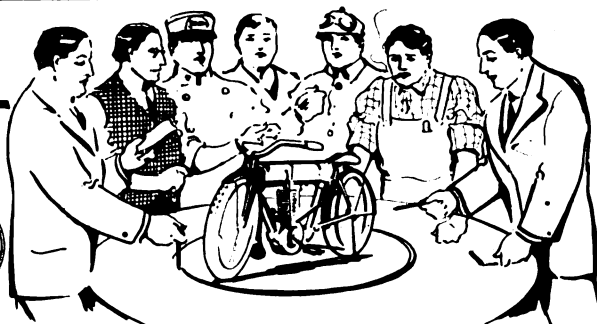
MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10. Total, \$100



THE announcement, made in the June 27 issue of MOTORCYCLE ILLUSTRATED, that this journal would award four cash prizes aggregating \$100, in an Improvement Contest, has set hundreds to cudgelling their brains for prize-winning ideas. Upwards of twenty suggestions have already been received, and almost every mail brings in a new one. The first series of proposals will be published in the next issue. For the benefit of those who may not have read the original announcement, the object and the conditions of the contest are reprinted, as follows:

Four cash prizes of \$50, \$25, \$15 and \$10 respectively, totaling one hundred dollars, will be awarded to those who propose the best four suggestions for the improvement of the present-day motorcycle. And in this connection it should be stated that our readers, no matter how gifted with mechanical ingenuity, should not attempt to design entire machines, but rather devote their efforts to the perfection of important details. This is not to say that new designs of motorcycles in their entirety are not wanted; on the contrary they will be welcomed by the editor of this contest. But to design a new machine that will be a distinct improvement upon any on the market today is sure to be a herculean task and, in any event, only the product of years of thought and steady application on the part of a mechanical genius. Still, it is not at all impossible that a contest of this character may bring out such a man and such an idea.

It is probable, however, that the prize-winning suggestions will have to do with details overlooked by the clever designers who make it their business to perfect the motorcycle. Therefore, it behooves every reader of MOTORCYCLE ILLUSTRATED to consider and analyze his own machine, and machines in general, from that point of view. Moreover, though the test of mechanical perfection will be applied to every suggestion received, on the other hand, liberal credit will be given for ideas in the rough, and their value will be measured on the following basis:

First of all comes the question, To what extent is this necessary? Then the three considerations of comfort, safety and convenience; then adaptability to different machines or their parts or accessories; mechanical perfection;

reliability; cost of manufacture; durability; simplicity, and neatness. In measuring the total value of each idea or design, one hundred points will be the mark of perfection, and the scoring will be done as follows:

Necessity and desirability.....	25 points
Safety, comfort and convenience..	15 points
Adaptability	10 points
Mechanical perfection.....	10 points
Reliability	10 points
Manufacturing cost.....	10 points
Durability	8 points
Simplicity	7 points
Neatness	5 points

Total 100 points

The terms "simplicity" and "neatness" do not refer to the form of the drawings or descriptions representing the ideas themselves, but to the finished result as applied to a motorcycle. In other words, competitors need not be draughtsmen. On the contrary, although drawings should be submitted whenever they help to make the idea clear, still such a sketch need only indicate roughly the idea it is intended to convey. Our staff artists will not only work out in finished form all rough drawings, but also make new drawings for accurately described designs.

Cash prizes will be awarded as follows:

First Prize.....	\$50
Second Prize.....	\$25
Third Prize.....	\$15
Fourth Prize.....	\$10

Total\$100

In addition to awarding these prizes, MOTORCYCLE ILLUSTRATED will pay at least \$1 for every suggestion published, immediately after it appears. Those who do not want their names published may contribute anonymously, but should an anonymously contributed suggestion prove to be one of the best four, the name of the proposer will have to be published in order to make him eligible for a prize.

CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.

6. The prize winners will be determined on the point system as outlined above by the editors of MOTORCYCLE ILLUSTRATED who, in making their announcements, will give the detailed scores of at least the best twelve suggestions.

7. At least one dollar will be paid for every suggestion published.

8. Competitors are requested to address all their communications to Editor Improvement Contest, MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York City.

ENGLISH NOTES

BY BRITISHER

Float Feed or "Injector" Type Carbureter? Valve Troubles on Racing Machines.

A FIERCE battle is now raging in the British market between representatives of the old type of float-feed carbureter and a legion of novelties embodying what is called the "injector" principle. The injector carbureters work on roughly the same lines as a barber's scentspray, and the motive underlying their design is to abolish fine adjustments of gasoline level and jet aperture, and to secure a more homogeneous atomization of the spirit. With the old type of carbureter the direction of the piston suction operated parallel to the axis of a vertical jet; with the new type the direction of suction is at right angles to jet axis. Friction of the gases is uniformly abolished with the new carbureters when both throttle and air-valves are fully opened, and on all the new types there is a clean straight-through run from the open atmosphere to the inlet valve; the basic principle is shown in Fig. 1.

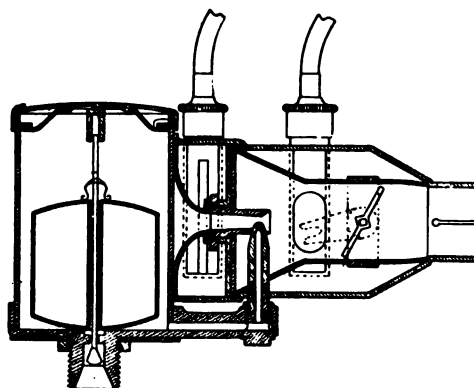
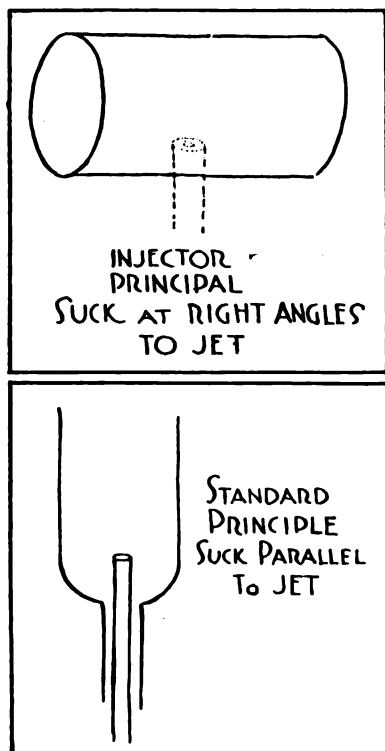
It is obvious that with a carbureter constructed on these simple lines the level of the gasoline is negligible; the suck of the fierce rush of air across the top of the jet yanks out the spirit, even if its surface be

located at the very foot of the jet tube; for similar reasons the diameter of the jet is of small import, and a .040 jet is the standard for all engines of $3\frac{1}{2}$ h. p. The most refined carbureter on these lines is known as the Senspray, of which a section is given in Fig. 2. The fixed air is inhaled through a tapered cone funnel opening right on the jet, and at right angles to it. This tapered cone is surrounded by an auxiliary air valve, roughly corresponding to the iris diaphragm stop of a kodak, or to the sliding vane ventilator of a street car. When the engine is once started this auxiliary air valve can be immediately flung wide open, and the engine driven all day long on the throttle control alone; the piston suction automatically provides the right proportions of air and gasoline vapor, while the taper cone suck mixes them very thoroughly. With a .040 jet I find the gasoline consumption varies according to the power taken out of the engine. I can run my racer on the road at ordinary touring speeds, and at the end of a long day's run register a consumption not exceeding 120 miles to the gallon; I can take the machine onto the track without altering a single adjustment, and roar round at 65 m. p. h., when the consumption rises to racing fig-

their valves are well made, they work admirably for all needs, with a minimum consumption of gasoline, and without demanding any close adjustments at all.

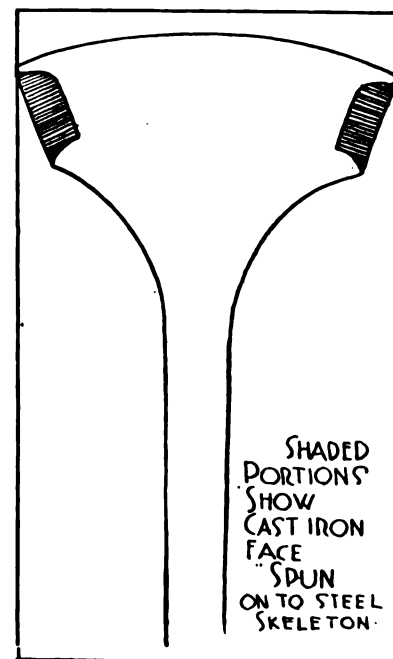
Valve Troubles on Racers.

THE blue ribbon of British track racing is the hour record on Brookland's track under the 500 cc. limitation; the figures now stand at 63 odd miles in the hour, and the holders are growing nervous, as a fortnight ago a 350 cc. horizontally-opposed twin-cylinder Douglas cheekily covered $56\frac{1}{2}$ miles inside 60 minutes. The main trouble with the $3\frac{1}{2}$ h. is to find an exhaust valve which will give decent compression towards the end of so fierce a spin. Cast-iron valves wear well so far as their working faces are concerned, but they are very apt to break and the heads sometimes "fly" and wreck an engine, while the stems pull out and stretch. Nickel steels of various alloys are free from fear of fracture, but with a 60-pound spring returning them whack on their seat 750 times a minute,



The Senspray Carbureter.

ures, 70, 60, or even 50 miles per gallon of fuel. I can find no criticism to pass on the principle of these carbureters in actual road work, provided they are well made; there is nothing to adjust, and they do not ask to be tickled when you wish to effect a start. Some of them have leaky throttle valves, in which case slow running in city traffic is not easily achieved; but provided



they pit badly, and often hammer the cast-iron seat out of true.

Practically all the firms which support racing regard the valve as the key to the

record. They have now learned all they can unearth about lubrication, about light steel pistons which resemble the Irishman's famous coat in being "a lot of holes neatly patched together"; about special cams, and special timings; and they are concentrating on the valve problem. Some of these firms have got just a single exhaust valve apiece, which lasts better than any other, and when one of their team turns out at any sprint event, the chaff is "Have you got the valve?" One firm uses a two-piece valve with nickel steel stem and cast-iron head, carefully hardened all over by a secret process; another uses a nickel steel valve, with a cast-iron ring spun onto the stem for the seat, and so forth. Another firm, which uses an overhead inlet valve, has swapped its valves round, and is placing the inlet beneath and the exhaust on top, so as to give the stressed exhaust valve the benefits of maximum draught for its spring and stem.

Foot-Operated Oil-Pumps.

ONE tip to be seen on the Tourist Trophy racers is the foot control of the oil-pump. A pedal on the footrest is used to fill the pump by means of a flexible Bowden wire, and a strong spring gradually discharges the contents into the engine, thus leaving the rider's hands permanently on the steering bar. Query—how will he slush his engine if a tumble deranges his footbar? In some cases the front brake has been eliminated. A powerful front brake is known to be perilous when rounding a corner, and in emergencies the frenzied jockey sometimes forgets his caution, and smashes on a very powerful front rim. So some machines are fitted with two belt rims, one on each side of the rear wheel, and both are provided with huge brake shoes and pedals. Nevertheless two brakes on one wheel can never be as efficient as one brake on each of two wheels; in the last resource the ground takes the brake-strains, and it is the amount of arrested contact area with the road that counts. We would rather have both wheels braked, and keep our head.

NEW MOSLER FACTORY

A. R. MOSLER & CO., manufacturers of the well-known Mosler line of ignition specialties, including the famous "Spit-Fire" spark plug, have moved from their office at 123 West Twenty-ninth street, New York City, to their new and modern factory, situated on the Bronx river near the Wakefield station of the New York Central railroad's Harlem division. The company has purchased two acres on which a two-story factory has been built. It measures 100 x 200 feet and is of model construction. The window area is unusually large and a skylight 20 feet wide runs the entire length of the building, giving more light than is generally found in a manufacturing plant. The factory is heated by steam and the power is supplied by a large two-cylinder gas engine. There are 500 electric lights in the building, the current for which is generated on the premises. The location is quite accessible, being only 40 minutes from the Grand Central station, or it can be reached by the Third Avenue elevated, connecting with the West Mount Vernon car. A. R. Mosler & Co. make a well-known line of ignition specialties, including the world-famous "Spit-Fire" spark plug.

SEVERE TRIALS FOR ENGLISH RIDERS

Contestants in Six-Day Grind Will be Penalized for Slightest Faults—Regulations and Timing System.

THE preliminary regulations for the August six days' trial are now published, and they make it plain that gold medals are not going to be given away with half a pint of gasoline. Indeed, if the weather is bad, and the ill-famed Devon and Somerset "zline" (as the yokels call it) smears the road with its treacherous film, the riders who emerge with perfect scores will be few and far between. It is possible that American roads—on which I have had no experience—are too bad to permit of similar rules being adopted on your side, but the rules will show how strenuously machines are tested on the fine highways we possess over here. The marking system is as follows. Each rider starts the trial with a capital of 1,000 marks; there are penalties for everything, from a barky silencer to a cut tire or "legging" round a hairpin bend on a steep hill. If you finish with 950 marks or over, gold medal; if with 950-850 marks, silver medal; if you complete the run within two hours of the official finish, and secure no other award, bronze medal.

Some of the Penalties.

Here are sketches of some of the penalties: Each day there are two official test hills; if you stop, pedal, or leg your machine on a test hill, bang go 50 marks. The timing schedule covers the *entire route*; it is not a question of being on time at advertised controls only. The complete 1,000 miles has been measured out by a calibrated speedometer, and distances are secretly marked at frequent intervals. At any of these known distance points, or at all of them, the watchholder may snick his chronometer on you. If you are ten minutes slow or fast on a 20-mile an hour basis at any point, you lose one mark per minute or part of a minute for your error; thus one hill failure, plus being 11 minutes out on time, will smash your chance of a premier award. Thus scrapping to catch up time after trouble is knocked on the head, and the whole 1,000 miles have to be ridden with one eye on the watch and the other on the speedometer dial; and both instruments must be accurate. As regards the hills, the route lies in the mountains of the west, and no single ascent is on a properly engineered or surface road; all the hills lie on crosslanes between main roads, where grading, cornering and surface are as crude as they can possibly be. Three of the known hills include grades worse than 30 degrees, and one of them begins at right angles out of a village, starts the ball with three wicked bends resembling a rectilinear corkscrew, has a surface like a torrent bed in the dry season, and keeps on climbing for four miles. On one day the route is a dead secret known to the secretary alone, and this has to be covered absolutely non-stop; it is supposed to contain the most virulent assortment of blind corners and sudden grades ever crowded into a morning jaunt, and is no less a test of the riders than of the machines. Other non-stop sections are also included, and the idea is to prevent riders waiting at the foot of bad hills to cool their engines, shorten belts and lower gears.

The sole time available for repairs and adjustments is cut down to 15 minutes per morning, and as tanks have to be filled in this period, and there will only be a couple of boys with one gasoline funnel and one measuring can, there won't be much surplus for tuning up carbureters. The list of spare parts to be carried is sternly specified, and is limited to tire outfit, spare plugs, one complete valve, belt and fasteners, or chain and links; magneto case, one cover, any number of tubes, control wires, nuts and washers. All outer covers will be marked at the start, and five marks will be deducted for each change of a cover; there is no penalty for changing tubes in running time, apart from any time losses so incurred. Tires may be repaired in control at night under observation, at a penalty of five marks a time. The riders will be secretly timed over short sections scattered over the route, and any rider exceeding 20 miles an hour will be penalized according to his pace. At the conclusion of the trial each machine will be closely inspected, and five marks deducted for each ascertained "demerit." Thus the conditions are so severe—taking the character of the route into consideration—that it may be impossible for any rider to finish with a perfect score, even in fine weather.

RODE IN OUTLAW MEET.

CHAIRMAN THORNLEY, of the F. A. M. competition committee, has received a report to the effect that William Marks, Milton Sammons, Albert Hanson, William Reese and two other riders, whose full names were not known, competed in an unsanctioned meet at Kansas City, Mo., on June 14, and he has accordingly issued a restriction against their competing in any F. A. M. sanctioned meet.

RODE TO HAGERSTOWN.

C. BILLARD, William J. Meyer, Raymond Padgett and Charles H. Grier, Indian enthusiasts of Washington, D. C., motored to Hagerstown, Md., on Saturday, July 6, returning on Sunday afternoon. This trip is a favorite one in this section as an attractive and historic country is traversed.

NEW COFFEYVILLE FIRM.

E. C. WILLIAMS, a well-known mechanic of Coffeyville, Kan., and Floyd Case, Excelsior representative in Coffeyville, have opened a first-class motorcycle garage. They have launched their business under the name of The Coffeyville Machine and Motorcycle Repair Company. Both members of the firm are boosters of the local club.

BOSCH IN T. T. RACES.

OF unusual interest to American manufacturers and riders is the announcement in the Tourist Trophy races just completed in England, that all the motorcycles to finish, in both classes, used Bosch magnetos.

ON NORTHERN TOUR.

BALTIMORE, Md.—Fred Wilkens and Julian Hecht left before the Fourth for a trip through New Jersey and Long Island, and managed to cover a great deal of ground in the short time they were away.

F. A. M. BOOSTERS*(Continued from page 43.)***Kansas.**

Henry A. Pinaire, Wichita, 5; M. M. Huyett, Salina, 7; Edwin Keller, Topeka, 8; Henry F. Pinaire, Wichita, 9; M. E. Harding, Topeka, 11; J. C. McCleery, Topeka, 13; Guy Elliott, Topeka, 17; G. E. Woodwell, Wichita, 20; Dr. B. J. Patterson, Rexford, 25; Edward Anderson, Salina, 26.

Iowa.

W. H. Knight, Sioux City, 5; Fred J. Barr, Davenport, 6; J. D. Simplot, Dubuque, 6; H. P. Yonkers, Cedar Rapids, 7; C. D. Hays, Waterloo, 8; Ray G. Pratt, Waterloo, 8; William Maus, Council Bluffs, 12; Robert L. Carson, Davenport, 28.

Montana.

M. Curnow, Butte, 7; R. B. Barnard, Anaconda, 20; G. H. Hill, Boise, Idaho, 22.

Oregon.

V. G. Maskell, Portland, 6; J. Benton Lindsay, Portland, 17.

Washington.

W. P. Glasgow, Tacoma, 6; R. A. Button, Tacoma, 6; F. G. Anderson, Olympia, 7; A. F. Hoska, Jr., Tacoma, 10; W. G. Ashley, Olympia, 15; Leon McNeal, Aberdeen, 15; C. J. Ritchie, Hoquiam, 23; E. L. Moore, Seattle, 43.

TO PURIFY GASOLINE.

AN ingenious device for filtering gasoline for motorcycle motors has been placed on the market by the National Sales Co., of 45 Milk street, Boston, Mass. It is called the Ellis Gasoline Purifier Junior, and its manufacturers assert that it will extract all water and sediment from the fuel supply before it reaches the carbureter, thus obviating the danger of clogging and disarranging that fitment. The device is made of aluminum composition and weighs about three ounces, including two brass unions of suitable size for making the connections. For fitting the purifier about three inches of clear space is required, preferably under the gasoline tank and on a line with the carbureter.

As the gasoline enters the precipitation chamber in the purifier it is filtered through two fine screens, felts and quartz, which catch all particles of dirt and paraffin. Any water in the fuel finds lodgment in the precipitation chamber and is held there as the gasoline rises and passes through the filters on its way to the carbureter. By turning a thumb screw the rider may release the accumulated water and sediment from the precipitation chamber at any time.

AN ECONOMICAL FUEL.

APURE hydrocarbon fuel, or gasoline freed from mineral oil, sulphur and the like is "Energine," the product of the Energine Refining & Manufacturing Co., 2005 Euclid avenue, Cleveland, Ohio. It is odorless, and non-carbonizing, and it is stated that by its use 37 per cent. more power is obtained with 27 per cent. less fuel. These figures are taken from tests made during March of this year by the United States government.

DEATH OF FISK OFFICIAL.

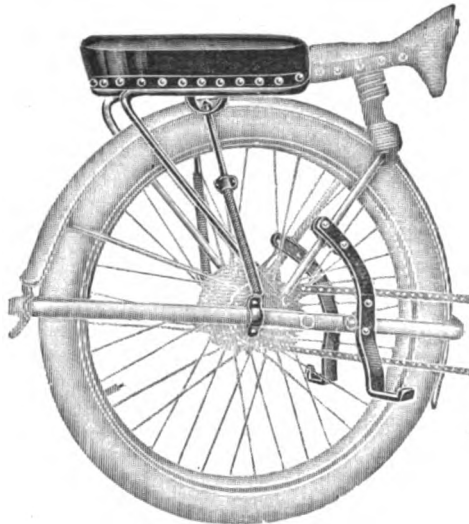
ANNOUNCEMENT is made by the Fisk Rubber Co., of Chicopee Falls, Mass., of the death of its treasurer, Alfred Nye Mayo. Mr. Mayo, who died on June 25, was widely known in trade circles.

FLANDERS AGENCY.

COLUMBUS, OHIO.—P. I. Haynes & Co., located at 45 North Third street, Columbus, has taken the local agency for the Flanders. The same company has the central Ohio agency for the Harley-Davidson.

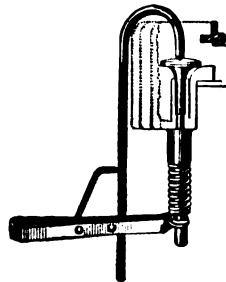
NEW TANDEM AND A VALVE LIFTER.

TWO accessories which will appeal to the rider are being produced by the Simplex Machine Works, Forty-fifth street and Sixth avenue, Brooklyn, N. Y. They are a tandem



attachment of moderate price and simple construction, capable of adjustment to any machine, and a valve lifter, both of which are illustrated herewith. The tandem device consists of a well-padded cushion, designed to be attached to the luggage carrier by straps and stirrups or rests attached to the rear stays and forks by clips. The stirrups are made of strong steel flat stock and will support the heaviest rider over the roughest roads without becoming bent. The price of the cushion part is quoted at \$3.50, with the stirrups for \$2 additional, per set of two.

The valve lifter is of very simple construction. It consists of a bent piece forming the handle or grip, whose ends form the jaws that fit under the valve-spring cup or washer. To this handle is pivoted a block tapped for the reception of the threaded portion of a bar whose upper end is bent to fit in the valve chamber and hold the valve on its seat. An angle piece whose edge can be engaged with the threads on the bar is also pivoted to the handle. When the valve is to be removed the hooked end of the bar is placed on the valve and the jaws under the valve washer. The



angle piece is engaged with the bar and forced downward by the thumb when the valve washer is lifted and the cotter easily withdrawn. By tripping the angle piece the spring is released. The device folds up flat, being but five inches long by one inch wide at the widest part. It is listed at 50 cents.

An excellent device shown in connection with the tandem attachment is the stand lifter for machines whose stands are not provided with such an attachment. One end of a spiral spring is clipped to the stand on each side and the other is attached to a bar which in its turn is attached to the luggage carrier frame, or mudguard. On pushing back the stand slightly, the springs snap it into the latch in short order, any kicking up being thus obviated. This device is quoted at 50 cents, per set of two.

CORBIN-BROWN SPEEDOMETER

Well-Known Manufacturing Company Will Market Device Embodying Several New Ideas.

THE Corbin Screw Corporation division of the American Hardware Company, of New Britain, Conn., announces that it will in future manufacture and market the Corbin-Brown speedometer. The device has heretofore been known as the Brown speedometer, but under the new name it will embody a number of valuable improvements. The advent of this corporation in the speedometer field is of unusual interest because of its unlimited capital and its large distributing branches and forces of salesmen at New York, Philadelphia, Chicago and San Francisco.

The Corbin-Brown speedometer is the invention of Colonel W. C. Brown, of New York, and was put to the severest possible tests for accuracy and efficiency before being adopted by the Corbin Screw Corporation. The name "Corbin" has been identified with manufacturing for more than forty years, and the Corbin-Brown speedometer will carry with it the same guarantee which this name has always implied. Colonel Brown, the inventor, will become sales manager of the speedometer department of the Corbin Screw Corporation.

AN F. A. M. NOVELTY.

THE D. & W. Novelty Company, of Gloversville, N. Y., is placing upon the market a neat product calculated to catch the eye of every F. A. M. enthusiast. It is a leather mat of jet black, bearing in red the letters F. A. M.,



and is so arranged that it may be fastened in an attractive manner to the cuff of a gauntlet. The company argues that every rider who salutes a fellow motorist on the road raises his right hand, and that the F. A. M. plate, when attached as in the illustration, will convey a greeting of double import. The idea is one which will probably make a wide appeal.

B. A. Swenson and wife, of Providence, R. I., left Providence early in the week of July 8 on their Indian Tourist twin and side-car, for Columbus, Ohio.

VISITOR FROM CLEVELAND.

BALTIMORE, Md.—The popularity of motorcycle touring is spreading rapidly, if one is to judge by the visitors who come to this city on single-trackers. The last one to pay a visit was Emil Hahn, of Cleveland, Ohio. Hahn left his home on his two-speed Indian on June 29 and rode across country to Syracuse, Buffalo and Albany. From the capital of the Empire State he headed down the picturesque Hudson to New York. From Gotham he went to Philadelphia and thence to this city by way of Wilmington, Perryville and Havre de Grace, reaching here on July 4. He had only one complaint to make, and that was that the road between Elkton and Perryville, in this State, was in a frightful condition. He stated that he had to plow through the deepest kind of sand, and that all he managed to do was creep along on low gear. Every motorcyclist who travels that road has the same complaint, and all are advocating the longer but better route to Philadelphia by way of Lancaster.

After laying over for a day Hahn went on to Washington, from which place he will start homeward by way of Frederick, Hagerstown and Cumberland, Md.; Winchester, Va.; Romney, W. Va., and Pittsburgh, Pa. By the time he reaches Cleveland he will have passed through eight States on his vacation.

HOW THE SIDE-CAR HELPS.

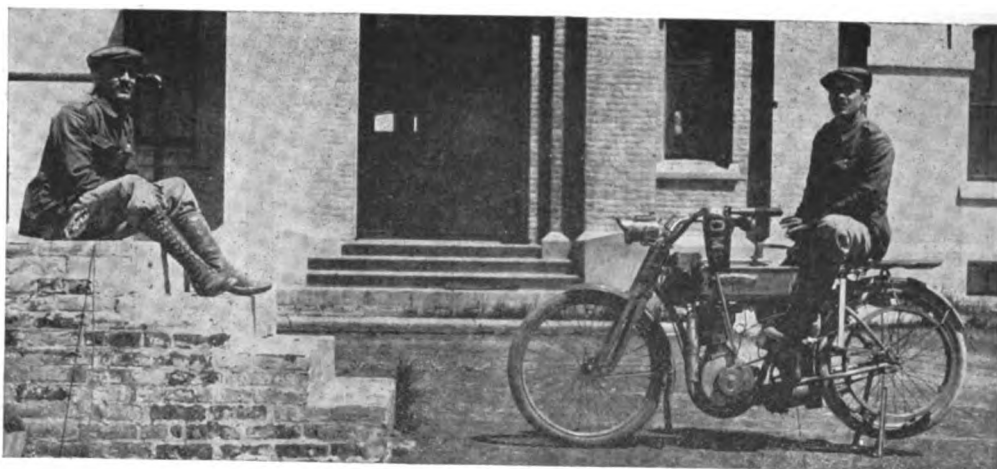
THE Majestic Manufacturing Company, of Worcester, Mass., reports that one of its salesmen, who has just returned from a two months' trip in the West and South, reports the motorcycle trade booming in spite of adverse weather conditions. It is evident from reports of dealers that the side-car business is a distinct boost to motorcycling. A typical illustration is the case of R. L. Davis, the Reading-Standard agent in Louisville, Ky. Mr. Davis informed the Majestic company's representative that the side-car made possible the sale of a twin machine to a customer who would not otherwise buy a motorcycle because he could not take out his wife, who declined to ride tandem. That the side-car, having come to stay, is sure to have a decidedly stimulating influence on the whole motorcycle trade, is an assured fact.

The Majestic company has several hundred side-cars in use in practically all parts of the



Howard W. Tromans, of Providence, and His Comfortable Majestic "Basket."

United States, with a large and rapidly increasing representation in Canada. In the accompanying photograph Howard W. Tromans, of Providence, R. I., appears with his Harley-Davidson and side-car, the passenger in the latter giving evidence of being perfectly at ease.



CALIFORNIAN MADE GOOD HIS CLAIM.

H. CONBOY, a rider of Alameda, Cal., recently rode to the top of Mt. Hamilton, in Santa Clara county, to prove that his machine, which is two years old, could take the grades. The unusual photograph reproduced herewith was taken to prove that the climb was made according to Conboy's claims. The

picture was printed from a double plate on each side of which appears the owner of the machine. What's more, he obtained the snapshots himself, operating the camera by means of the long rubber tube which may be seen trailing away from the machine in each view. Conboy is justly proud of his feat.

PROPOSE NEW ORDINANCE

New York Motorcyclists Would Benefit by Adoption of Regulations Suggested by Special Committee.

MOTORCYCLISTS, as well as automobilists in New York City, will find much to interest them in the report of a special committee on motor vehicle speed regulation which was appointed by the Board of Aldermen some time ago to revise the existing ordinance. The committee is headed by Alderman Ralph Folks, who is of the opinion that more liberal speed regulations should be framed and then enforced rigidly. He suggests that the speed limit for ordinary motor traffic in the city be placed at fifteen miles, and that the limit on highways in outlying districts be made twenty-five miles. The speed limits are now eight miles in the city and fifteen miles in the less congested districts.

The committee's recommendations are based upon the claim that the regulations are now generally disregarded, being looked upon as unreasonable, and that if more liberal limits were fixed the driver who exceeded them could have no excuse to offer. In addition to the fifteen and twenty-five-mile speed limits, however, there are the following special regulations: On approaching bridges or in turning corners of intersecting streets, or in passing schools on school days between the hours of 8 a. m. and 4 p. m., the rate of speed must not be greater than ten miles an hour, and in overtaking or approaching a surface car which has been stopped to take on or let off passengers, motor vehicles must come to a full stop within at least six feet of the car, and must not pass the car until it is again on its way.

Referring to the present policy of the Police Department, the committee's report states that it has been the aim to arrest speed offenders, but the ordinary patrolmen and officers on horseback were helpless when an automobile driver was to be held up. It is pointed out that the only members of the force in a position to cope with the high-powered cars are the motor-cops, and that for this reason the motorcycle squad should be greatly increased in size. It now numbers twenty-five men, not half enough to patrol

adequately the many thoroughfares on which automobile speedsters are wont to disport themselves. One of the committee's recommendations is that additional motorcycle officers be appointed without delay.

Another section of the report deals with the failure of many automobile owners to provide rear lights on their machines. This provision is of prime importance to motorcyclists, as a heavy percentage of accidents in which the single-trackers have figured of late have been caused by the failure of the automobile or wagon driver to display a rear signal. It is stated that ten per cent. of the cars observed on Fifth avenue on a certain night were without rear lights, and that the lamps carried by many others were so small and dirty that it was impossible to observe a light. While these cars remain on Fifth avenue or any other well-lighted thoroughfare the absence of a rear light is not likely to cause serious trouble, but as soon as they take to the open road they become a menace, particularly to motorcyclists. Other automobiles, furnished with two and sometimes three and four headlights, are not likely to strike even an unlighted obstacle when traveling at reasonable speed, but the motorcyclist with his single lamp is in constant danger. If the committee succeeds in strictly enforcing the rear-light provision it will be a most important step toward the protection of the traveler who uses the motor two-wheeler at night.

WASHINGTONIANS ARE GOING.

WASHINGTON, D. C.—Members of the Indian M. C., of this city, are preparing to attend the Columbus meet in a body. They will leave here in the early morning and make Cumberland, Md., a distance of 138 miles, the first day. The second day will take them to Wheeling, West Virginia, 132 miles; the third to Zanesville, Ohio, 72 miles, and the fourth to Columbus, 55 miles. A number of Washington motorcyclists will go to Columbus by train.

A FOUR-THOUSAND-MILE journey on a motorcycle is being taken by E. F. Starke, of Richmond, Va., during his summer vacation. He is traveling west with San Francisco as his destination.

SOME TIRE TIPS

GEORGE M. JOHNSON

EVERY now and then one reads an enthusiastic recommendation written in favor of some brand of tire by a rider who claims to have done anywhere from six to twelve thousand miles "over stony roads," which strenuous treatment has left the tires almost as "good as new," with the raised treads "not even worn down." I don't wish to appear over skeptical, but I do take such rash statements with the proverbial grain of salt. When a rider says that he has done so many thousand miles without his tires showing signs of wear, I think of a short and ugly word, which I am usually too polite (or too diplomatic) to use.

Yet it may be that these riders are actually sincere in their claims, and have overestimated the mileage. Are these wonderful stories of tire service proved by speedometer, or merely guessed at? And there is one other thing. Some machines have the speedometer driven from the rear wheel, which means that the little indicator is registering mileage whenever the motorcycle is being warmed up or adjusted on the stand, unless it is fitted with a clutch that is disengaged as soon as the motor starts. That is my objection to a rear-driven speedometer, and I once mentioned it to a fellow rider whose machine was equipped in that way.

"Oh, I won't run up ten miles in a season," he exclaimed confidently, but when I took occasion to note his methods, I found he was very much mistaken. I know that he added hundreds of miles to his season's score through running the motor on the stand, and he one time even boasted that he could make his speedometer register seventy-five miles an hour—on the stand. Perhaps some of the tire enthusiasts have done this.

Careful Handling Needed.

Now I have ridden for four years, and while I do not pretend to qualify as an expert or anything like it, I feel that I do know a little about motorcycle tires, and I know that there is something exceedingly peculiar about five thousand miles of hard riding without signs of wear. For instance, my new 1912 twin has covered nine hundred miles by Jones speedometer so far this season, and the studs on the rear tire (one of standard make) are worn down nearly flush with the tire surface. If there is really a motorcycle tire made which will last season after season, I should like to get a pair; the whole motorcycling world is crying for such tires. Mine never last quite that way, and they have the best of care and attention, too.

However, there are some things to remember concerning tires, and in view of the many recruits who are constantly joining our ranks, it might not be amiss to note down some of

the important details that will tend to give satisfactory tire service. With motorcycles as automobiles, tires make the biggest single item of expense, and anything that will help keep that down is certainly worth while.

In the first place the tires, especially the rear one, since most of the weight and nearly all of the wear comes on it, should be properly inflated. This is an old, old warning, yet many riders ignore it. Tire experts tell us that insufficient inflation is responsible for nine-tenths of all tire trouble. It causes tires to "rim cut"; they are more likely to be damaged by sharp stones than when pumped hard, and the tire itself is apt to disintegrate. This last is caused by the constant bending of the tire walls under the weight, so that the layers of rubber and fabric tend to part company and break down under the strain.

The Inflation Problem.

Just what is sufficient inflation for a motorcycle tire? A good way to be absolutely sure is to write the tire company and ask them what pressure will give the best results; then buy a gauge and see to it that the tire is kept up to the right point. Of course many details enter this. For a light rider the tire need not be kept so hard as for a heavy one. The following is a good test, if you do not adopt the pressure gauge idea; when the rider is in the saddle, the tire should show practically no depression under his weight. If there is a bulge which is at all noticeable, that tire has too little air, and to ride it for any great distance is to go hunting for trouble.



"Leak so small as to defy discovery."

Another great cause for lack of satisfactory service is in having the machine "undertired"; that is, fitted with too small tires for the work they have to do. Automobile owners have experienced the same difficulty. Putting small tires on a heavy machine may look like economy at first, but it may double the tire expense for the season. Now, applying this to motorcycles, you should be sure that the tire on the rear wheel is big and heavy enough for the task required of it. A two and one-half inch tire is large enough for single work, but if you desire to ride tandem, you are expecting too much of that size of tire. In tandem riding the weight on the rear wheel is increased tremendously, and of course that increases the wear. Therefore for the tandem a two and three-quarter (or even three) inch tire should be specified. If tandem riding is only indulged in now and then, the larger tire is perhaps not so essential, but where the smaller one is used there should at least be plenty of air in it.

Economy in Large Tires.

When a sidecar is driven one should also have a larger tire on the rear wheel than the two and one-half inch, if expense is to be kept down. To be sure, not so much weight comes on the drive wheel as in tandem riding, since the passenger's support is shared between the two wheels, but how about the work that drive tire does? That is even more severe than is the case with the tandem. The rear tire not only has to grip the road hard enough to send forward the double load, to which we must add the weight of the car itself, but in addition there is the side strain caused by the unequal distribution of the weight. So when you drive your sidecar along with a two and one-half inch tire, you are putting on that tire work that it was never built to stand. The mere fact that tires do deliver fair service under such unfavorable conditions only goes to show how far the rubber companies have progressed in the art of building tires.

The new rider does not always realize that a slowly leaking tube may not of necessity indicate a puncture. The valves are quite prone to give trouble, and if the cap does not make the valve stem air tight, a puzzling leak is usually the result. If a tire requires pumping up every twenty-four hours or so, it is a good plan to test the valve before taking the tube out to hunt for a possible puncture; if the leak is really in the tube, this will save a good bit of time and bother. Another place for a puzzling leak is provided by the seam of an endless tube. The leak may be so small as almost to defy discovery, yet it is there, and the rider must pump up the tire several times

a week. One of these seam leaks is also trying in that it is quite difficult to make a sure job of patching; the air seems determined to find a way out somewhere.

The Puncture Bugaboo.

When you are confronted by a sure enough puncture on the road, before removing the tube to explore for the leak, slowly revolve the wheel and look carefully over the casing surface for the cause. There is a fair chance that the trouble was brought about by a nail or bit of wire, and if you can discover where the leak is, you need remove but a small portion of the tube to make repairs. If the puncture is the deadly work of a nail, be sure to look on the other side of the tube, for there is frequently a double hole, where the intruder went clear through. Many riders have had the mortifying experience of finding that the tire refused to hold air after they had put the tube back in place, through their thus doing only half a job. Strong language will never remedy trouble of that kind; the only thing is to begin over again.

A bad cut, one that goes through outer rubber and fabric, should really be vulcanized. Yet vulcanizing is an expensive process, and means also that the machine is to be laid up for a number of days at least, which is a considerable hardship to the average rider. He

can often make more or less permanent repairs himself, by means of the conventional inner blow-out patch. Then the hole in the rubber should be plugged with one of the different brands of tire dope on the market.

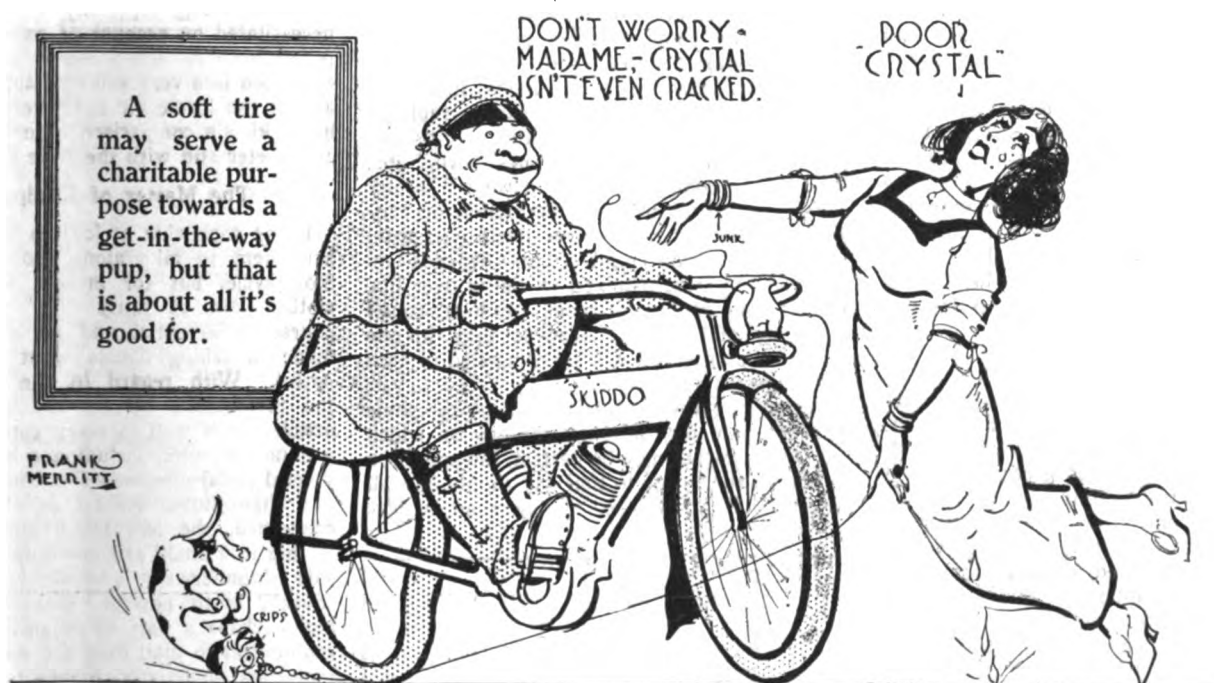
I recently accomplished what I regarded as a bit of very clever repairing along this line; the casing was badly cut by a sharp piece of glass or metal, laying open the fabric right down against the tube for a length of three-quarters of an inch. The remarkable thing about it was that the tube was not cut at all, nor did it blow out, even though it was the rear tire that suffered. The cut occurred while I was on a night ride, and I did not discover it till next morning. I cleaned the cut casing, inside and out, with gasoline, and then applied a liberal dose of cement to the inner surface. I then pressed a home-made blow-out patch into service. This was made of two thicknesses of adhesive Pull-e-tape which I had on hand for lagging my front pulley. Over the sticky tape I placed a section of starched cuff, and after giving some minutes for the whole to set, I inflated the tire and plugged the outer hole. Thus at an expense of five or ten cents I saved the vulcanizing bill of two dollars and a half, and was not forced to go without the use of my precious two-wheeler. The tire, though in-

flated as hard as need be, shows not the least swelling or bulge where the cut is located.

Haste Does Not Pay.

In patching a tube on the road it does not pay to be in too much of a hurry. Give the cement plenty of time to get dry and tacky before pressing the patch to the tube. The temptation is for the amateur repairman to slap the patch on right away, so that he can be off down the road with the least possible loss of time. A patch hurriedly applied, before the cement has dried enough, is not likely to hold, as my experience has demonstrated several times. Only lately, I was compelled to take off a patch and glue it on again, because the air still found a way out. I had been so eager to get through that I failed to do a decent piece of work.

In conclusion, let me add this: don't boast about your good luck with tires, if you are so fortunate as to have any. I covered all last season without a single puncture, and was brash enough to spread the good news around without tapping my wooden pate to keep the hoodoo at a distance. I am getting it this season—at the rate of a puncture to every two or three hundred miles. It is always a risky thing to crow over good luck; I'm through with it.



BALTIMOREANS PLAN RACES.

BALTIMORE, Md.—If arrangements now being made do not miscarry Baltimore will have motorcycle races at Electric Park on Labor Day. Howard A. French and the Indian M. C. are promoting the races. It has been almost a year since this city has had any motorcycle racing.

BALTIMORE BREVITIES.

BALTIMORE, Md.—The various clubs are again turning their attention to Sunday runs and weekly spins at night out into the country. Riders who were training for the Fourth of July races at Benning and Laurel will now have time to get out on the road with the other boys and jog along at an even pace.

"The Grand Old Man" of motorcycling in Maryland, Captain W. S. Fisher, of the Indian M. C., is the proudest man in this

old commonwealth. On the Fourth he entered the parade in Druid Hill Park, conducted as a part of the safe and sane celebration, and won a handsome silver trophy for the best decorated machine.

Captain Standiford, of the Maryland M. C., is waiting anxiously for his new mount to arrive so he can again lead the boys on their runs across country.

The riders are turning out in larger numbers on the weekly runs of all the clubs, the diamond-studded gold medal offered by Howard A. French being an incentive. This trophy will go to the member of any club who attends the most runs during the season.

BALTIMORE OUTING.

BALTIMORE, Md.—The members of the Maryland M. C. held their annual outing on Sunday, June 30. Sixty-three riders

went down to Tinley's shore, on the Middle river, and spent a fine day. Besides the dinner there were numerous athletic events on the program. Matt Gault, the former captain, was an easy winner in the jumping contest; the boat race was captured by Robert French and Roy Smith; the old reliable, William Wood, Maryland F. A. M. Commissioner, had things his own way in the quiet and dignified game of quoits; Duke Richardson took the swimming event handily, while Fred Wilkens proved that he was the most expert with the pistol. Howard A. French demonstrated his ability as a champion balloonist. The baseball game, always a feature, was won by the Racycle Club from the Maryland boys by a score of 12 to 9.

TWO new motorcycle policemen have just been added to the squad in Galveston, Texas.

WASHINGTONIANS ON NEW ENGLAND TOUR.

ROAD TIPS AND HOW
TO GATHER THEM

S. S. KALISHER

It was after a long rainy spell last August that I started with a friend on what we expected to be a two-week's ride on our motorcycles, covering a route beginning at Washington, D. C., through New York City and Boston to Portland, Me.; thence across the White and Green Mountains to Burlington, Vt. From this point we turned southward to Albany and New York City and back to Washington, going via Philadelphia, York and Gettysburg.

For some time I had been looking up the best available maps and route books, and had made application to the various New England State highway commissioners for reliable data bearing upon the different routes and road conditions in their respective States. Very little, if any, satisfactory information was obtained from these commissioners, for the reason that they are informed only with the condition of the State highways, and not with those which do not come under their jurisdiction. However, all of the replies I received were of some use, as a general description of the roads was given.

Tips for Tourists.

The best available information is that published in the Blue Book, issued by the American Automobile Association, although by adhering strictly to the routes given therein, it often leads one through roundabout streets in the larger cities and over circuitous routes through the country. In many cases so far as good roads are concerned, a better route can be taken by disregarding the routes as published in the Blue Book, especially in entering and leaving large cities, and making inquiries from reliable sources, such as automobile clubs, garage keepers and motorists for the better roads. Information even from these sources is sometimes misleading, for in sections where good macadam roads predominate, and where there are occasional poor and badly worn stretches of such roads, one may be directed to take such a route instead of a route over a good dirt road; the latter, as every motorcyclist knows, is easier going if in good condition. The danger of being thrown from a motorcycle by the deep ruts, together with the general shaking up caused by the roughness thereof, are two of the most objectionable features of a badly worn and neglected macadam road.

Often, too, directions are given in order to avoid a hill, or a hilly country via a circuitous route over a poor road, on the theory, I suppose, that motorcycles are not hill-climbers. I had the pleasure of demonstrating what a 5 h. twin motorcycle can do over a hilly country to an automobilist, after he had cautioned

me about "the hills." In requesting information one should be specific in his inquiries about the construction and condition of the road in question, i. e., whether it is constructed of macadams, gravel, dirt, clay or sand; and whether any rain has fallen recently, and if so, to what degree. By weighing these subjects properly, one can determine for himself, after some experience, the better road.

How Queries Are Answered.

No satisfactory information, as a general rule, can be obtained from pedestrians and farmers along country roads. They do not measure distances by rods or miles; in answer to questions, one usually gets such a reply as "Oh, it's a bit of road from here," or "it's just above the school house, or Jones' barn," etc., etc. Road conditions are always "pretty good," regardless of the construction or condition. After all, it resolves itself into this: What is a good road? This depends on whether one is accustomed to riding over fine asphalt and macadam roads or over rough dirt, clay and sandy roads; so that, in one case or the other, he will be compelled to base his judgment accordingly.

Recent weather conditions require some consideration, for, although the day on which the trip is started may be perfect, the condition of the weather prior to that day should be well weighed. For instance, a clay road in dry

weather may be almost perfect, but after a week of rain, it may be impassible. Oil-covered macadam roads dry very quickly, the water in fact runs off as it does off a duck's back. In short, the best plan in selecting a route is to consult the Blue Book and outline therefrom, in a general way, the trip and route in contemplation. Inquiries at certain points along the route will be helpful in determining which of the alternate roads are in the best condition. Good road maps are most valuable to carry along, especially where a detour is necessitated on account of road repairing and rebuilding. A speedometer and cyclometer combined is a very valuable appliance to have, as one can locate himself wherever he may be by making a comparison of mileages with the cyclometer and with the Blue Book.

The Matter of Equipment.

I was somewhat at loss to know just what equipment to take along, not alone for the motorcycle, but for myself, in the way of clothes, etc. A fairly "fat" pocketbook, of course, is essential and no mistake will be made in taking double what you expect to spend. With regard to the equipment for the motorcycle, besides the usual tool bag articles, it is well to carry extra spark plugs, a puncture outfit, including a blow-out patch; several pedal pins, miscellaneous nuts, washers, and chain links. As far as one's clothing is concerned, the less taken along the better. Riding in a khaki suit one only needs an extra suit of underwear, a comb, brush (hair and tooth), tooth powder, socks, handkerchiefs, and perhaps a pair of pajamas. While it is economical to mail back the soiled linen, it is easier and sometimes cheaper, to purchase low-priced linen and throw it away when soiled. This will obviate the trouble of wrapping up the bundles and mailing them, which at merchandise rates, often amount to more than 50 per cent. of the value of articles.

Besides one's clothing, an A. A. A. route book (or extracts from it), together with reliable road maps, should be taken along. A bundle of the above articles wrapped in a rubber sheet, and strapped to the handlebars, makes the easiest and most convenient luggage outfit. A luggage carrier is often in the way. I started out with a small telescope bag strapped to my luggage carrier, which, on account of the many unnecessary articles contained therein, was burdensome and heavy; after several days of riding I threw it away (one of the rods of the luggage carrier having broken), and strapped a bundle on the handlebars, which answered all purposes very well. I also carried an Eastman 3-A kodak, with which I took about 60 pictures, although it



A "Fat" Pocketbook is Essential.

proved a very troublesome article because of its frailness and the trouble of getting it in and out of the bag, or the bundle.

The Daily Mileage.

As noted, road maps are very valuable and they can be filed and carried conveniently. Much boasting has been done about the number of miles traveled per day, but for one to appreciate and see the country, including the stops in the larger towns and cities, a run of from 75 to 100 miles per day is sufficient, especially when traveling continuously for two weeks. One cannot make much more than an average of 15 miles per hour for a day's run without fatigue and without violating the speed laws, particularly through a thickly populated States, like Massachusetts, for instance.

The roads in and about Washington, especially within the district line, are usually very good, being constructed largely of macadam with an oiled covering. Between Washington and Baltimore the road for the most part is good macadam, excepting a bad clay stretch between Bettsville and Laurel, Md., a distance of about 5 miles, which is now under reconstruction. After a heavy rain this section of the road is almost impossible to travel over on a motorcycle; one is usually compelled to push a motorcycle for the most part. The Bladenburg road, just out of Washington, is badly worn for about three miles, to a point near Hiattsville, Md., and a short bad stretch of rock road exists just south of Elkridge, Md.

We left Washington for Baltimore just after a heavy rain on a Saturday afternoon in August, it being our intention to take the Errickson Boat Line, plying between Baltimore and Philadelphia, late the same afternoon, in order to avoid a bad stretch of sand road between Havre de Grace and Elkton, Md. In this way we would arrive in Philadelphia early Sunday morning, and, under ordinary conditions, could make the run from there to New York City on Sunday.

A Narrow Escape.

We went out of Washington by way of H street, reaching the Bladensburg road, i. e., the Washington-Baltimore road at Fifteenth street N. E. All went well until we reached Bettsville, Md., when we encountered the bad stretch extending from this town to Laurel. We headed fearlessly up the first hill, then down and over a few more and finally at the base of one we struck a lake, lying peacefully in our path. I went through it at angles too numerous to mention, reaching the summit of the hill well decorated with Maryland clay. At the bottom of the next hill I was not quite so successful. Not that I headed for the next "lake"; I didn't. Instead, I tried to follow a narrow, slippery clay path, but I could not stay on it somehow, so off my wheel I went and into the water. While the fall was not heavy the front fork of my machine was so badly bent that it required the combined strength of four men to straighten it out. For the greater part of the 5-mile stretch, we were obliged to push our machines and we reached Laurel somewhat exhausted. All went well again until we reached Elkridge, where the B. & O. R. R. crosses the road. A freight train had just passed, and in order to reach Baltimore in time to catch our boat I pressed forward. Just as I was about to cross the tracks the gates came down and I had the option of either breaking through them or doing the next best thing. I chose the latter—



Grant's Tomb, New York.

at least it appeared so—for I found myself "bumping the bumps" over the rails and finally I pitched over the handlebars of my motorcycle and landed between the tracks in front of the approaching train. It is needless to say that I did not stop to think twice. I got out of the way, and with the assistance of several men I placed the remains of my motorcycle in a baggage car and returned to Washington.

A Fresh Start.

On the next Saturday afternoon, after my motorcycle had been repaired, we started out again for Baltimore, reaching that city just as it started to rain. We got aboard the Philadelphia boat, wet through and through, and after having dinner we decided to "turn in" for a good night's sleep. Any one who has taken this trip by night, and especially those occupying a forward berth, will tell you that sleep is out of the question, especially while going through the canal between Chesapeake City and Delaware City. The disturbance—a continual one—is caused by the operation of steering apparatus, which I discovered later was on the order of a donkey engine, which when set in motion, fills the boat with a rumbling clattering noise that no number of motorcycle, with mufflers wide open, could outdo. After leaving Delaware City I snatched a short nap, only to be awakened by the breakfast bell, which, regardless of my sleepless night, was music to my ears. After breakfast we enjoyed sitting on the deck of the boat up the Delaware river, going over our itinerary and maps and finally reached Philadelphia about three hours late.

A little time was spent in getting our machines out of the boat and getting a supply of gasoline, which the garage keeper insisted "contained no water," and did not need to be

strained through chamois. If space would permit, it might prove interesting to the reader to know what I said and did, when after considerable delay out on a country road with not a sign of human existence in view, I took almost the entire engine apart only to find water in the carburetor. "Never again" was the slogan, so at Trenton, we emptied our tanks and refilled them with strained gasoline. The road to Trenton for the most part is very good on the Pennsylvania side, except for a short worn stretch of macadam of about two miles. We followed the course as given in the Blue Book, which, while somewhat troublesome to a motorcyclist in getting out of Philadelphia, nevertheless proved to be a series of good macadam roads.

At Trenton we paid 10 cents toll and attached our non-resident New Jersey licenses. New Jersey was the only State north of the Potomac river that required non-resident license and this regulation has since been set aside for motorcycles. The roads are practically perfect. One never needs to inquire about New Jersey roads; they are nearly all in fine shape.

We reached New Brunswick, N. J., late in the afternoon over a fine macadam road, had some lunch, and then headed for New York City by way of Perth Amboy and Staten Island. By following the New York automobile signs along the way headed with an arrow "To New York," we soon found ourselves well towards Elizabeth, N. J., so instead of turning back to go via Perth Amboy, we continued on our way into Elizabeth and decided to stay there overnight.

The Arrival in New York.

Early the next day it rained. When it stopped at noon we started off over slippery roads to Newark, N. J., where we were compelled to travel over cobblestone streets for about three miles. A fine asphalt road extends across the meadows to Jersey City, at which place we followed an automobile with a New York license, which took us over a roundabout macadam road and a short stretch of cobblestone street to the Pennsylvania Ferry. We paid a ferry toll of 10 cents for each machine, and were soon in New York City. We went up West street to Eleventh street and then across to Fifth avenue. After many stops at street crossings we reached Central Park, and after visiting the Zoo we headed for Harlem, where we remained over night.

The next morning we started for Meriden, Conn., and chose the old Boston Post road for our route to Boston. We reached New Rochelle and then rode on through Stamford, South Norwalk and Bridgeport, Conn., reaching New Haven well into the afternoon. From this place there are too good roads leading to Hartford, one by way of Meriden and the other by way of Middletown. We chose the former and for a short stretch we had the pleasure of racing with a N. Y., N. H. & H. R. R. passenger train. We reached Meriden, Conn., late in the afternoon and remained there overnight.

The next morning we left for Worcester, Mass., by way of Hartford, Windsor Locks and Springfield. Between Windsor and Windsor Locks the road was closed for repairs and it was necessary to make a detour over a very sandy stretch of road five miles long. We took several spills in going over this stretch, and after pushing our wheels over several hills we reached Windsor Locks, crossed the Connecticut river and followed a fine macadam



In the Connecticut Valley.

road into Springfield, Mass. Just before entering Springfield we came across a road oiler which was spraying its blackish substance upon the road. In trying to go through, or over this newly oiled section, our machines skidded and before we could bring them to a stop, both of us landed upon the road. We picked ourselves up, all covered with tar-oil and later, at Springfield we, as well as our clothing, had a gasoline bath.

It was 4:30 when we left Springfield for a 50-mile run to Worcester, over one of the finest roads in Massachusetts. This stretch is sparsely settled; in fact, in many places no signs of human habitation are seen. I lost my friend at Palmer on account of our hurry and determination to reach Worcester before dark, and rode without a stop into Worcester. There we met and remained overnight.

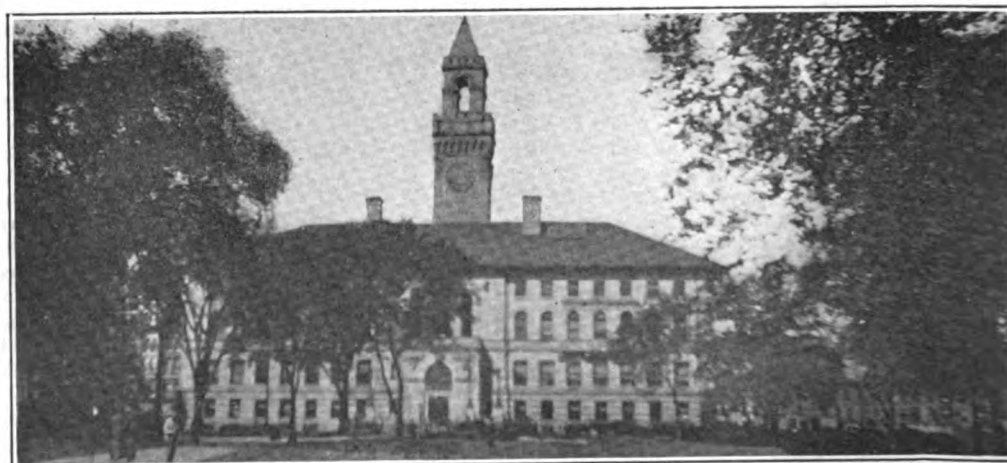
The Run to Boston

Late the next morning we headed for Boston by way of Marlboro, Maynard, Concord and Lexington, partly over very good macadam roads. We spent several hours both at Concord and Lexington, taking in the various places of interest, and reached the outskirts of Boston in the afternoon. As in most of the larger cities, we soon struck a badly worn macadam road at Arlington, which later developed into a cobblestone street. We crossed the Harvard Bridge over the Charles river into Boston and left our motorcycles in a garage nearby. We spent the next day visiting the numerous places of interest, such as the old State House, Christ Church, Faneuil Hall (the cradle of American liberty) and Bunker Hill monument.

Our next stopping point was Portland, Me., by way of Newburyport and Portsmouth, N. H. We were advised to take a route via North Andover and Merrimac to Newburyport, which we did in order to avoid the narrow cobblestone streets of Lynn, Salem and Beverly. However, a portion of this route proved very rough on account of road building and repairing, but as a whole, it is preferable to the route through Lynn, Salem and Beverly on account of the condition of the streets in these cities. Rain overtook us just as we left Merrimac, but we rode on in it, reaching Newburyport just before noon, thoroughly soaked. The rain continued almost in torrents all of the day, so in the evening, in company with a friend, we enjoyed a typical New English fish and clam dinner at a restaurant on Plum Island.



Minute Man, Concord, Mass.



City Hall, Worcester, Mass.

On the Return Trip.

The next day, after receiving definite information as to the almost impassible roads between Portsmouth, N. H., and Portland, Me., due largely to the heavy rains, we decided to return to Boston by way of the "coast" route. It was noon when we left Newburyport and the roads were very slippery. We picked our way over a macadam road through Beverly, Salem and Lynn and entered Boston by way of Revere Beach Parkway. We were sorry to miss a visit to the President's house at Beverly, and the Roger Williams House and the First Church at Salem, but were compelled to do so on account of weather conditions, and the desire to reach Boston that evening. Early the next day in a fine rain we headed for Plymouth by way of Quincy and the shore route. A fine oiled macadam road extends for the entire distance. After lunch at Plymouth and a visit to Plymouth Rock and to the National Monument to the Pilgrims, we headed for Fall River, which we reached about dark, after some hard going over partly sandy roads. Here we remained overnight and left on the following day for New London, which we reached in the afternoon. At Newport we took a ferry across Narragansett Bay to Jamestown, rode across Conanicut Island and then took another ferry to Saunterstown. The roads all the way to Narragansett Pier are good, but at the Connecticut State line, and practically along the entire shore line to New Haven, Conn., the road is not at its best as it recently was given a coat of oil, and a light sand dressing.

Upon leaving New London the next day for New York City, I was advised to take the "shore route" via South Lynne instead of the upper road via Flanders to Saybrook. It proved to be a very sandy and hilly road which made riding somewhat difficult, but we reached Saybrook without any mishap, taking the regular trunk road at that place. I was told at this place that the upper road was all macadam. We passed on through New Haven and back over the route to New York City, reaching the metropolis after a hard day's run.

Having remained at Harlem, we left early the following day, headed through Central Park, down Fifth avenue to Broadway and down to the Battery, where we embarked on the Municipal Ferry for St. George, Staten Island. This we accomplished after several narrow escapes from collisions with pedestrians, especially in lower Broadway. Leaving St. George, we continued over a fine, but winding

macadam road to Tottenville, but before reaching this place I had an unfortunate and unavoidable collision with an Italian fish peddler, who, while trying to cross the road with a basket full of fish and shrimp on his shoulder, passed in front of my machine. In a second the street was strewn with fish. After some delay, caused largely by a wrathful officer of the law who tried to get the Italian to have us arrested, we reached Tottenville, crossed the ferry to Perth Amboy and returned to Philadelphia, reaching there in another rainfall.

On the Home Stretch.

The following day we left Philadelphia for York, Pa., by way of Coatesville and Lancaster. The going was bad, due largely to the long rainy spell, and the general condition of the road which for the most part was unfit for travel. Several fine but short stretches of macadam road, however, were encountered.

On leaving York the next day for Gettysburg we were advised to go via New Oxford instead of via Hanover, on account of the condition of the dirt roads on the latter route. A fairly good macadam road extends to New Oxford, but the abandoned pike from that place into Gettysburg is almost unfit to ride on.

We spent some time in and around the battlefield at Gettysburg and left there in the afternoon for Frederick, Md., where we remained overnight. A very rough dirt road extends from Gettysburg to Emmitsburg, Md., but from this place a fine macadam road runs direct, down grade, into Frederick. There are three routes leading from Frederick into Washington; the first is via Hyattstown and



"The street was strewn with fish."

Rockville, and while the shortest and most direct route, it is, however, a rough one, especially in the vicinity of Hyattstown. For the most part the road is composed of dirt and rocks as far as Rockville, from where a fine macadam road runs directly into Washington. The second route is via the National Highway—a fairly good but somewhat rough stone and gravel road to Ridgeville, thence

south over a new macadam road through Damascus and over a good dirt road to Laytonsville, where a fine macadam road leads into Washington Grove and Rockville, where it connects with the first route as given. The third route is via the second route given above as far as Laytonsville. From this place a good dirt road leads to Only. Here the old Seventh street pike intersects a poor stone and gravel road leading through Wheaton and Sligo direct into Washington over Georgia avenue. Of the three routes given, the second, via Ridgeville, Laytonsville, Washington Grove and Rockville is by far the best.

The Trip in Summary.

The following schedule shows in summary form the days of travel, the places reached and the distances traveled:

Saturday, Washington to Baltimore, 44 miles, rain in afternoon; Sunday, Philadelphia to Elizabeth, N. J., 84 miles; Monday, Elizabeth to New York, 15 miles, rain in morning; Tuesday, New York to Meriden, 95 miles; Wednesday, Meriden to Worcester, 94 miles; Thursday, Worcester to Boston, 45 miles; Friday, Boston; Saturday, Boston to Newburyport, 48 miles, rain in afternoon; Sunday, Newburyport to Boston, 48 miles, rain in morning; Monday, Boston to Fall River, 85 miles, showers all day; Tuesday, Fall River to New London, 68 miles; Wednesday, New London to New York, 115 miles; Thursday, New York to Philadelphia, 94 miles, rain in afternoon; Friday, Philadelphia to York, 90 miles; Saturday, York to Frederick, 63 miles; Sunday, Frederick to Washington, 52 miles.

BROOKLYNITE GIVES TIPS FOR TOURING

How to Select the Essentials in Equipment for Long Road Trips and Eliminate Articles Which Encumber the Luggage Without Being of Practical Value—An Ideal Riding Costume.

WITH preparations complete for the 1912 tours to the F. A. M. convention and general touring interest at top pitch throughout the country, thousands of motorcyclists are facing the old equipment problem—the question of what to carry on the road, and how to carry it—and for that reason the following information is doubly pertinent. It is submitted by William Hetherington, Jr., a motorcyclist of Brooklyn, N. Y., who has found that the choice of clothing and equipment makes or mars the average tour. Mr. Hetherington is a rider of several years' experience, and his suggestions are based upon first-hand observations.

"The usual mistake of the inexperienced motorcyclist," says the Brooklynite, "is to overload his machine with articles which should have been left behind, and overlook the items that are of prime importance. Experience will remedy this tendency, of course, but in the meantime the rider is putting up with a lot of annoyance which is overcome by the tourist who gives careful consideration to the necessities for his outing. Obviously, the quantity and scope of the equipment depends upon the length of the tour to be made and the character of the country to be traveled, but for general purposes it is safe to base our calculations upon a two-weeks trip. The suggestions I am about to offer refer to the arrangements for such a tour.

"To begin with, the equipment may be divided into two sections, motorcycle articles and personal effects. For the motorcycle, in addition to the regular tool kit, it would be well to carry a 6-inch flat file, which will be found to have a surprising range of service; a spoke wrench, a 3-inch piece of soft iron or copper wire and spare nuts for the front and rear axles. These articles will require very little room, and when they are needed they come very close to being worth their weight in gold. An extra pedal pin should be carried to replace the pedal which is almost certain to be broken at some stage of the journey—usually in a district where a repair shop sign has never been known to dot the landscape. Inner liners for the tires will prove very valuable and will do away with the necessity for carrying an unwieldy load of patches and cement. A supply of "prepared" patches should be carried for punctures, but the inner liners will greatly reduce tire troubles, and incidentally reduce the size of the repair kit.

"Only the most inexperienced rider will venture upon a long trip without a large hand pump; a small one may seem more desirable at the start, but after a few pumping experiences the tourist will see his mistake. Spring clips for holding the pump will pay for themselves in satisfaction in short order. An extra chain or belt link should always be carried, and failure to have it in an emergency may mean a hot, tiresome walk to the nearest

town. It is also well to carry a pocket oil can; squeaks that develop in the running gear on long jaunts are usually trivial if given prompt attention, but if neglected they may pave the way for a break or other trouble. At any rate the pocket oil can is worth the room it occupies.

For carrying his personal effects the motorcyclist will find that a small leather suitcase, about 16 x 14 x 10 inches, will best suit his purpose. This will be of a very convenient size for strapping on the luggage carrier, and it may be so fastened that it can be quickly removed. The following articles are essential, and all of them can be conveniently carried in the suitcase. They are: Three suits of underwear, six pairs of socks, four handkerchiefs, two negligee shirts, a Litholin collar, a necktie, small pocket comb, brush and mirror; small whisk broom, tooth brush, tooth powder and hand paste. A small bottle of peroxide of hydrogen, a piece of court plaster and a bandage roll are also desirable articles in the touring equipment. A pint bottle of grain alcohol or witch hazel may also be carried by the rider who needs to rub out the "kinks" in his limbs after the first day or two of road work. In the rider's coat pocket may be carried a collapsible drinking cup, which at times will rank as just about the most important article in the entire outfit.

For wearing apparel a salt and pepper whipcord suit and cap to match, make the best

combination. Army duck leggings are far more comfortable than leather for warm-weather riding, and they afford full protection. I have also found kid gloves more satisfactory for the hands than a pair of heavy gauntlets. When the run for the day is over and the rider desires to "spruce up" for the evening a piece of art-gum will remove the dust from collar and cuffs and the more noticeable stains of travel from the clothing. If the rider desires to be protected from sudden showers which may overtake him on the road he may carry a raincoat. It can be rolled up and strapped on the handlebars or tank of the machine when not in use, and will take up very little room. I have found that half the pleasure of a trip by motorcycle lies in being properly equipped, and as the suggestions offered above have been of practical value to me I feel that they should assist other riders in getting the most out of their summer jaunts.

A NERVY GIRL RIDER.

MISS ADA KLEIN, of Newport, Ky., who appears in the accompanying photograph on her 4 h. Excelsior, is the only girl motorcyclist in her section of the State. She



has been a rider for nearly a year and has made a number of fairly long runs, always returning with her mount in good shape. Miss Klein sometimes takes her younger brother out for a short jaunt as a tandem passenger.

DENVER'S NEW MACHINES.

FOUR new motorcycles have been purchased for the flying squad of the Denver (Col.) police department. With a view to giving different makes of machines a general test the Fire and Police Board decided to invest in an Excelsior, an Indian, a Harley-Davidson and a Flying Merkel. An itemized account of the running expenses for each day will be kept, and at the end of three months an expert machinist will be called in to test the machines and give an opinion as to the relative deterioration. This trial, in combination with the expense account, will determine which machine is to be adopted as the regulation mount for the city's police department. Twelve new machines will be added as soon as this decision is arrived at. The motorcops will wear a khaki uniform with cap to match, and pigskin puttees. Bids are being received on these riding togs by the Police Board.

LOUIE BREIT, trouble man for the Missouri and Kansas Telephone Company, at Coffeyville, Kan., has purchased an Excelsior machine to use in his work.

NEW TYPE OF ROAD-HOG

Motorcyclists of Coffeyville Are Anxious to Locate Farmers Who Forced Rider into Ditch.

MICHAEL HIGGINS, of Coffeyville, Kan., recently was made the victim of as contemptible and uncalled-for a trick as a motorcyclist has ever had to contend with. While riding along a country road Higgins saw a team of horses approaching him, drawing a wagon which was occupied by two men. Higgins cut out his power and practically stopped his machine to avoid frightening the horses, and was about to dismount when the men signaled him to continue. At the same time they pulled their horses to the side of the road. Higgins opened up his throttle again and headed down the road to pass the wagon. When the rider was only a few yards away the men in the wagon suddenly turned their horses across the road in front of him. There was no time to stop the machine, and Higgins was called upon to make a quick choice between riding full-tilt into the horses or going into a ditch at the side of the road. He chose the latter course.

Unfortunately the sudden jerk as the machine left the road broke the spark control and Higgins was unable to stop his mount. Instead of falling in the ditch the motorcycle mounted a hill on the other side, tore through a hedge fence and chugged into a freshly-plowed field. Here it turned over and gave Higgins a bad fall. Bruised and bleeding, the rider crawled back to his machine and stopped the motor by yanking off the magneto connections. Then he looked for the men who had caused the trouble and saw them standing up in their wagon enjoying a hearty laugh at his expense. When they saw that the "fun" was over they whipped up their horses and disappeared. When Higgins reached his home it was necessary to have three stitches taken in his nose and two over his right eye. No clue has been obtained as to the identity of the men in the wagon, but if they are ever located Higgins and his fellow riders of Coffeyville are going to leave nothing undone to make things exceedingly warm for them.

MARKING CROSS-STATE TRAIL.

THE Waubonsie Trail, a well-known trans-State highway across southern Iowa, has been extended to Indianapolis, Ind. This trail is the first marked road across Illinois, according to the statement of W. J. Staples, of Shenandoah, who has just made the trip by automobile to Indianapolis, marking out the road. The road now reaches westward as far as Lincoln, where it joins the River-to-River road to Denver. The new trail passes through Beardstown, Springfield, Decatur, Champaign and Danville in Illinois.

A PROSPEROUS CLUB.

AT the last meeting of the Toledo (Ohio) Motorcycle Club J. W. Siler was appointed as delegate to the F. A. M. convention and A. B. Coffman, of the Consolidated Mfg. Co., was named as alternate. Six applications for membership were received by the club at this meeting, and the treasurer reported that with all bills paid there was a balance of \$100 in the club's coffers.

TIP FOR WAGNER RIDERS.

E. N. PATTON, of Hattiesburg, Miss., submits the following tip for owners of Wagner motorcycles. While on a 75-mile trip recently he broke the exhaust valve of his machine and was in dire straits until he thought of using a Ford automobile valve. He managed to reach a town called Laurel, where a Ford valve was obtained, and the only change necessary was the enlarging of the pin hole. With this makeshift fitting he made a return run of about 35 miles without difficulty.

VICTORY FOR SIDE-CAR.

STILL the side-car boom continues to grow. In the accompanying photograph an Ohio enthusiast is shown exulting over the fact that his fair passenger, who is taking the picture, has just refused an invitation to desert the side-car and return home in an automobile. The machine is a Flying Merkel 7 and the basket is one of the comfortable new Baxter models.



NEWS FROM THE NORTHWEST.

RAY TEMPLETON, one of the most enthusiastic motorcyclists of Portland, Ore., started a few days ago on a trip to Indianapolis by motorcycle. Templeton did not bother figuring a riding schedule, as he is in no hurry to get over the road. He will spend considerable time in Spokane, Boise, Salt Lake, Denver and Kansas City on his way to the Hoosier capital. Templeton mounts a Harley-Davidson.

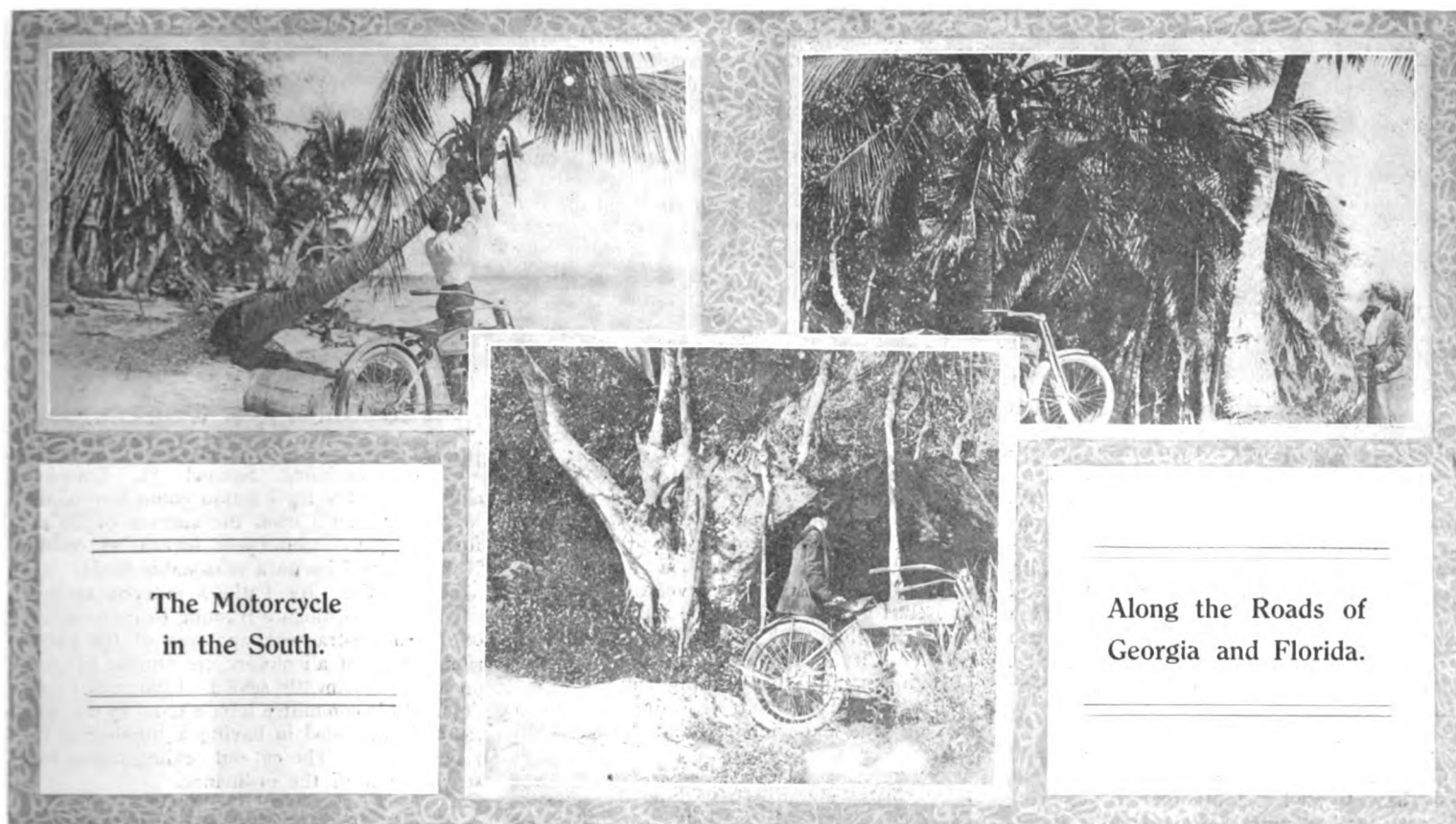
Clinton Hull, for some time past president of the Tacoma (Wash.) M. C. has found it necessary to resign, and his duties will be taken up by John McCain, one of the best-known motorcycle boosters of the city.

H. H. Armstrong, who has the Portland (Ore.) agency for New Era machines, has also contracted to act as distributor of the New Eras for Oregon and Washington. His establishment is at 1327 Fourth avenue.

ENTERTAINED A WARRIOR.

A PICTURESQUE visitor at the home of Flying Merkel machines in Middletown, Ohio, not long ago, was Chief White Eagle, a full-blooded brave, who announced that he hailed from Indian Territory. He was driving a team of horses with which he is touring the country. White Eagle inspected the Merkel plant, but refused to mount a motorcycle.

MOTORCYCLE speeders in Des Moines, Iowa, must pay a \$100 fine for their second offense, according to the announcement of Police Judge John T. Conroy. Three speeders were arrested recently, who confessed to careless riding. They were each fined one dollar and given the above warning.



A VERSATILE HOST

J. S. Bretz Entertained the Cheer-Up Association and Also Gave Some Pointers on Cricket.

AS merry a crew of congenials as ever embarked from New York City on the trail of cooling breezes and all the other essentials of a "big day," went down to Eckstein's brewery on Staten Island on June 17 to be formally initiated into the J. S. Bretz Cheer-up Association, and thereon hangs the tale of an outing which will stick in the memory of its participants for many a day. As is generally known, Herr Bretz finds plenty to keep him busy in the J. S. Bretz Company, which specializes on the importation of F. & S. bearings and U. & H. magnetos, but he is enough of a philosopher to realize that the man "works best who plays best." Accordingly, he is an enthusiastic follower of outdoor sports and a believer in recreation in the broadest application of the term. His activities as host throughout the Staten Island program proved this to his friends beyond question, for the J. S. Bretz Cheer-up Association lived up to its name from soup to nuts and from schweitzerkase to a certain dark brew which was much in demand. In other words, there were eatables, drinkables and good nature in abundance, not to mention widely-varied athletic contests and a series of cricket games.

Speaking of cricket, by the way, a game was in progress on a certain Staten Island field not long ago when a crack batsman knocked a long fly which appeared to be good for four runs. But it wasn't. Just as the ball seemed to be flying clear, a six-foot athlete in flannels ran out and caught it in his ungloved hands. The flanneled player was Captain J. S. Bretz, leader of the first team of the Veteran Cricketers' Association. All of which is a mild way

of saying that Herr Bretz is a man of many sides, all of them worth knowing.

GOOD NEWS FOR RIDERS.

THE law which compels the people of Iowa to cut weeds and drag their roads must be strictly obeyed, according to an edict pronounced recently by Attorney General Cosson. Mr. Cosson sent the word to the State convention of county attorneys, in session at Cedar Rapids, to impress the importance of the two laws upon them. This is good news for the motorcyclists of the rural districts of Iowa, for the road drag is the best-known remedy for the "chuck hole" which is the terror of the touring motorcyclists.

QUINCY HAS A MOTOR COP.

EDWARD MENKE, a well-known motorcyclist of Quincy, Ill., has been appointed as the city's first motorcycle cop. He mounts a Pierce single, furnished by John Ridder, Pierce agent in Quincy. Of late drivers of motor cars have been using some of the more prominent streets as speedways, and it will be Menke's duty to remedy the situation or yank the offenders into court.

The Oscar Kathman Co. has opened a high-class motorcycle shop in Quincy, which will be headquarters for Flying Merkel machines.

ESCORTED THE AUTOMOBILISTS.

MOTORCYCLISTS of Des Moines, Ia., rode to the outskirts of their city on June 29 to greet the automobilists participating in the big tour of the Denver Chamber of Commerce, who passed through Des Moines in their trip over the famous River-to-River road. The single-trackers escorted the car owners through the city and several miles out on the highway.

A MOONLIGHT OUTING

Savannah Club Escorted Big Squad on a Five-Hour Jaunt—Fans Are Working for a Track.

SAVANNAH, Ga.—Five hundred Savannah motorcyclists and their friends participated in the second annual moonlight outing of the Savannah M. C. on Thursday night, June 27. The procession got under way at 9 o'clock in the evening and was not disbanded until about 2 a. m.

The new officials of the club are developing plans for several social and racing programs to be held during August and September. There is some talk of holding two 100-mile events, for singles and twins, on Labor Day. An endurance run to Augusta, Ga., is on the tapis, and plans are also being discussed for beach races to be held at Tybee. Owing to the success of the lantern parade held some time ago, it is likely that another will be arranged in a week or two. On the whole, there is no danger of the club riders finding life monotonous for the remainder of the season.

Of late some of the club members have been boosting a scheme to obtain a dirt track, three-quarters of a mile to the circuit, in or very near Savannah. It has been suggested that the club should subscribe \$500 toward defraying the expense, and other individual members and local dealers have stated that they are prepared to make donations.

FRED VAN LIEW, superintendent of public safety in Des Moines, Ia., has requested that four new motor cops be added to the police squad. The city now has three motorcycle officers who have shown excellent results.



DOING STUNTS ON HENDERSON.

IN the accompanying photographs are shown Henderson machines, snapped while their riders were executing stunts on Belle Isle, Detroit's beautiful little island park, which is located on the Detroit river. The low center of gravity and the even distribution of weight and power in the Henderson machines enable the rider to take unusual liberties and the two enthusiasts shown in the pictures appear to be perfectly at home as they spin along over the driveway. Visitors to Belle Isle see many Hendersons these days, and the clean-cut lines of the machines, the absence of vibration and noise and the obvious ease with which the motorcycles are handled deeply impress all who give them even a passing glance.



PLANNING FOR BARBECUE.

THERE was a large turn-out of members of the Atlanta (Ga.) M. C. on a recent social run to Hampton, Ga., and, as a result, plans are being laid for a number of other outings. Trips are being arranged to Warm Springs, Tallulah Falls, Rome, Chatanooga and other points, and interest in the club affairs runs high. On Sunday, July 30, the club will make a run to Folsom's Park, 16 miles from the city, where an old-fashioned Georgia barbecue will be prepared.

CLUB IN MIDDLETOWN.

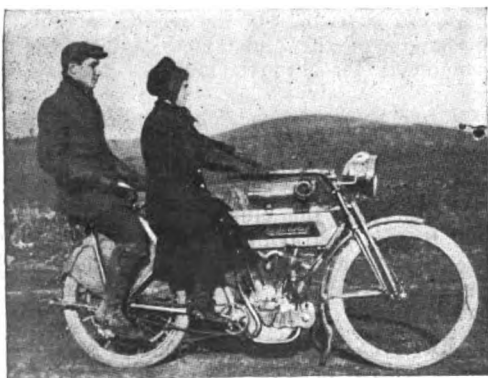
MOTORCYCLISTS in Middletown, Ohio, have formed a club and steps are being taken to affiliate with the F. A. M. F. M. Wittlinger, of 523 Yankee road, is secretary. The club held its first meet on July 4 and plans are being laid for several social runs.

FOUR CLUBS PROMISED.

AMONG enthusiasts who announce that they have new F. A. M. clubs on the way are the following: Willard E. Smucker, of Orrville, Ohio; Walker & Snyder, of Missoula, Mont.; Harry K. Bergerud, of Fergus Falls, Minn., and A. C. Penteter, of Watertown, Wis.

A FULL-FLEDGED ENTHUSIAST.

IN the accompanying photograph appear F. B. Shear, of Oakland, Cal., and Mrs. Shear, the latter piloting the twin Excelsior on which they have made many long trips. A new Excelsior was ordered some time ago, but Mrs. Shear became so impatient while waiting for it to arrive that she talked her husband into buying a Thor single for her personal use. Formerly she had not ridden alone, but after driving the Thor for a week she decided that she would not care to ride



any other way in future. As a result Mr. Shear will have the new Excelsior all to himself when it arrives.

A SIX-DAY TRIP.

WALTER BACON, of Gas City, Ind., accompanied by Mrs. Bacon, has just arrived in Philadelphia, Pa., after a highly successful motorcycle trip across country. They traveled via Ft. Wayne, Ind., to Sandusky, to Cleveland, to Erie, Pa., to Buffalo, and thence through Syracuse, Binghamton and Scranton to the Quaker City. The distance covered was 1,025 miles, and the running time was six and a half days. No tire or mechanical trouble was experienced, and Mrs. Bacon



was so well satisfied with the trip that she expressed her willingness to return in the same manner. Thirteen gallons of gasoline were used and about two and a quarter gallons of oil. The total running expense was \$22. Bacon states that he used a 29 by 2 3/4-inch Goodyear tire on his rear wheel. The accompanying photograph was taken in Gas City just before the riders started on their long jaunt.

EXPORTS INCREASING.

WASHINGTON, D. C.—Figures submitted by the Bureau of Statistics, Department of Commerce and Labor, for May, show a big increase in the value of bicycles, motorcycles and parts exported from the United States. In May, 1912, the value of such exports was \$143,898, as against \$82,445 in May, 1911. For the eleven months ending May, 1912, the total value of such exports was \$1,020,912. For the same period ending May, 1911, the total value was \$797,595. For the same period ending May, 1910, the total value was \$550,198.

RALPH DE PALMA, the near-winner of the 500-mile race at the Indianapolis Motor Speedway, began his racing career as a motorcycle racer.

CONGDON IS A WORKER.

MOTORCYCLISTS of Baltimore, Md., are congratulating Samuel H. Congdon, chairman of the legal action committee of the Maryland M. C., upon the success of his efforts to place motorcycle legislation in the Monumental City on a reasonable basis. Not long ago the City Fathers entered upon a campaign of ordinance-framing to curb owners of the single-trackers, and one of the provisions was that all motorcycle muffler cut-outs must be permanently sealed. Chairman Congdon and his committee took a hand in the matter and succeeded in having a number of revisions made. The cut-out sealing clause was stricken out of the ordinance.

PASTOR ON FOREIGN TOUR.

THE Rev. Alfred H. Backus, pastor of the Methodist Episcopal Church in La Grange, Ind., has sailed from Montreal, Can., for a tour of Europe by motorcycle. He mounts an Excelsior single, and intends to divide his outing into three parts, "John Wesley's Circuit by Motorcycle," "The Italian Trail of St. Paul by Motorcycle" and "European Mission Stations by Motorcycle." He will return to resume his pastoral work in La Grange in October.

A MOTORCYCLE TRAVELER

KENNETH SMITH, who travels Iowa and Nebraska for the Globe Tanning Co., of Des Moines, is a believer in motorcycles in general and a booster for the Henderson in particular, as the accompanying photograph indicates. It will be noted that Smith carries a large sample



case, but despite this extra load he has experienced no difficulty in plugging over usually rough roads in Nebraska.

WASHINGTON, D. C.—The next big event in the motorcycle line for this locality will be the meet at Benning's track, Labor Day.



A HANDY OUTFIT.

FROM Trenton, N. J., come the unusually interesting side-car pictures reproduced herewith. One shows David Sanford, a painter, who does not hesitate to load his basket with the materials of his trade when it is not being used for passenger work. He says the outfit is a time and money-saver. In the other photograph a Trenton patrolman is using Sanford's outfit in an emergency case. The side-car passenger has looked too long upon the amber fluid so widely popular during the recent hot spell, and is therefore not in a position to appreciate his first side-car ride.



HABICH'S BIG OUTING

Two Hundred Motorcyclists Enjoyed Day at Woodland Camp of Genial Indianapolis Dealer.

INDIANAPOLIS, Ind.—“Lost—One perfectly good duck, somewhere in the vicinity of the Habich camp in the central part of Indiana. Finder may keep it.”

While the above notice has not been inserted in the “Lost Column” of any newspaper, it might well go there. On Sunday, June 30, Gus Habich gave his fourth annual motorcycle run and picnic at the Habich camp, just fifteen miles of good road north of Indianapolis, and the feature of the outing was a duck chase. As will be inferred from the above notice, there is still a good duck dinner waiting to grace the table of the lucky person who can find it.

Four ducks were released in the river at the Habich camp, but when about forty motorcyclists swam after them three of the fugitives were captured. A motorcycle may be fast on a board track, but when it comes to the water the ducks have a lead. It took Charlie Bramlet, who captured the first of the three ducks, just twelve minutes to do so, and at the end of the chase Bramlet was much more exhausted than the duck, which made the fatal mistake of climbing out on dry land instead of sticking to the water. The other two “roasts” were captured by Leo Banks and Jim Chadwick. The latter had to swim fully half a mile. This event was the “mystery contest” which Habich had promised, and it was a fitting finale to the big picnic.

There were fully 200 motorcyclists present at the picnic, although only about 125 machines were in line for the picture in front of the Habich motorcycle shop at the start. A ball game was played in the morning at the picnic grounds, and by the time the dinner bell rang every one had a great appetite. As usual, the dinner that Habich served was a top-notch.

In the afternoon all kinds of contests, from motorcycle obstacle races to ladies' running races, were held and good prizes were awarded. The fifty-yard dash for the thirty ladies present furnished some excitement, and the winner, Miss Viola Allen, went home carrying a good camera. Harry Graff, president of the Indiana Motorcycle Club, and George Stone, of the Indianapolis motorcycle police squad, mated up for the three-legged race, which they won. They were awarded Thermos bottles as prizes.

Motorcycle “cop,” Dick Pressly, was a

runner-up in the obstacle race in which the motorcyclists had to ride across country and dodge bottles which were arranged so that only the most skillful riders could make the trip without knocking the obstacles over. Fred Small and Will Bryan took first and second places respectively.

To make the day more enjoyable for those who cared to smoke, Edward W. Mink and Lester G. Sigourney, of the New Departure Manufacturing Company, passed around the famous special brand of New Departure fifteen-cent Havanas. The two salesmen were extremely popular by the time they opened the second box of cigars.

The day was fine and the picnic was the best Habich ever gave, which is saying something.

ONE FORM OF AMUSEMENT.

THE motoring community of Toronto has been up in arms over the despicable action of some narrow-minded individuals who have been deliberately scattering large tacks on the main roads leading out of the city. A number of the Toronto riders have suffered punctures as a result of the mean trick. A reward was offered for the capture of the offenders but the latter have so far eluded the authorities.



Miss Ley, of Columbus.

PETERSON WAS GAME

Denver Sheriff Wrecked His Motorcycle in a Thrilling Race with a Union Pacific Train.

SHERIFF CHARLES E. PETERSON, of Denver, Col., is nursing a score of bruises as the result of trying to beat a Union Pacific train at its own game, a contest in which he lost out when the motorcycle he was riding broke down two miles south of Platteville. Peterson was serving papers in that part of Weld County and drifted into Brighton, where he met a friend. They stood talking until the afternoon train was about ready to leave.

“See you later,” said the friend, an officer.

“You’ll see me sooner than that,” was Peterson’s response, and he and the engine started at the same time. Passengers became interested in the race, as mile after mile was reeled off. The rider was ahead of the flyer when something snapped. The frame cuddled up close to the front wheel and the machine, then traveling at forty miles an hour, stopped. Peterson kept on going for about sixty feet.

The passengers thought he had been permanently disabled, but Peterson jumped to his feet and waved his cap. He applied baling wire to the motorcycle and later arnica to himself, and still maintains that he could have beaten the train if his machine had not been taken with cramps at such a critical time.

ELECT TRAYMORE OFFICERS.

THE Traymore Athletic and Motorcycle Club, of 623 West Girard avenue, Philadelphia, Pa., held its annual meeting and election of officers recently when the following staff was chosen for the current year: Andrew Schickling, president; David Dunn, vice-president; Albert Fairfield, secretary; Clem Kieffer, treasurer, and William Germann, recording secretary. Secretary Fairfield announces that he will be glad to hear from touring motorcyclists who intend to visit Philadelphia, and explains that the club is laying plans for several programs that will boost the cause of motorcycling in and about the Quaker City.

THE Coffeyville (Kan.) M. C. has the honor of having a “factory man” as a member of the club, and is doubly proud of the fact. Z. Godin, representing the Hendee Manufacturing Company, recently joined the club ranks and is one of the city’s most consistent motorcycle boosters.

TOURING



TO SOUTHERN BATTLEFIELDS

L. C. MEREDITH.—Go from Mountain Lake Park to Deer Park, Altamont, Wilson, Bloomington, Westernport, Franklin, Phoenix, Barton, Moscow Mills, Pekin, Laconing, Gilmore, Paradise, Ocean, Upper Ocean, Borden and Frostburg. Distance 36 miles; roads good and level, with fine mountain section between Wilson and Bloomington. Join route 11 reversed at Frostburg to Hagerstown, Md. From Hagerstown go to Fiert Sid, Lappans, Mondel, Sharpsburg, Shepards town, W. Va., and Harpers Ferry. Distance 25 miles; fair to good hilly roads. Return over this route to Hagerstown and follow back on route 99 to Washington, D. C. From Washington take route 98 to 18.1 Fairfax, where take left road to Centerville and Manassas, 32.2 miles. Go on through Bristoe, Catlett, Calverton, Midland, Remington, Elkton, Brandy, Inlet into Culpepper. Distance Fairfax to Culpeper, 63.1 miles. Indifferent roads. At Culpeper reset odometer and continue on route 98 to Richmond.

From Louisa it is about a 20-mile run to Spottsylvania, through Cuzco, Mercersville, Glenora, Andrews, Margo and McHenry. Rejoin route given to Richmond. Take route 89, Richmond to Petersburg. City Point can be reached from Petersburg via Halfway house; country roads, somewhat over 10 miles. Take route 90, Richmond to Old Point Comfort; Williamsburg is on this route. From Williamsburg cross to Jamestown, then to south shore of James river and follow south bank to Claremont. From the latter place go south through Spring Grove, Savedge and Carsley (country roads) to Waverly, where join route 89 to Norfolk or Richmond. Distances are estimated between Williamsburg, Claremont and Waverly, 45 miles. Route not mapped.

TO MIDDLETOWN, N. Y.

HENRY J. PARRY.—From our Spring Touring Number, page 14, take route 34, New York to Delaware Water Gap. Use this route reversed: call 203.8 New York, the start and reach Denton; 57.9 miles out. Go on to 59.6 miles, when turn right at 3-corners. Middletown is 4.8 miles from Denton.

BOSTON TO BUFFALO.

E. M. GUEST.—Referring to our Spring Touring Number, take route 10, Boston to Pittsfield. From Pittsfield go to Albany, N. Y., over route 26 reversed. Take route 28 from Albany to Utica, and route 49 to Syracuse. From Syracuse take route 47 to Buffalo.

TO AND FROM BRETTON WOODS

CLIFFORD H. BISSELL.—1. Take the west shore route up the Hudson to Newburgh. 2. Turn off at Poughkeepsie to go to Pittsfield. Go from Fishkill Landing north to Poughkeepsie. 3. Take route 22 reversed from Brettton Woods to Portsmouth. It is

the only main and direct road to the coast. Wolfboro is reached from Ossipee, going southwest to Lake Wentworth and Lake Winnepesaukee. Turn right at 3-corners, Ossipee, go on to 6.2 miles, Wolfboro Center, and reach Wolfboro Falls next (9 miles). Wolfboro is 9.4 miles out of Ossipee. 4. We prefer route 37 to Lakewood and Asbury Park. 5. Take route 34 to Delaware Water Gap by preference.

DAYTON TO NEW YORK.

N. A. KREIDLER.—Follow back over route 133 to Columbus from Dayton. Take route 136 to Sandusky, then route 103 reversed to Cleveland. (For reversal of route see method in touring section, June 27 issue.) From Cleveland go to Erie, Pa., over route 138 reversed. From Erie go to Buffalo over route 29 reversed. From Buffalo take route 47 to Syracuse, reversing it. From Syracuse to Utica, see detailed route under separate cover. From Utica for Albany take first part of route 28 reversed. From Albany to New York, see routes under separate cover. This gives the best route from Albany to New York and should be taken reversed.

Ohio riders, when licensed, are exempt in New York State. At present there is no license necessary in the latter State for motorcyclists. Use the Blue Book, published by the Automobile Blue Book Co., and obtainable at any automobile supply house. Vol. 4 takes in the Middle West, and Vol. 1 New York and Canada.

LITTLE ROCK TO PONTIAC.

HOMER ADKINS.—Follow route 310 from Little Rock to Memphis, Tenn., taking the route reversed. Take route 311 to Sheffield, Ala., then route 314 reversed to Nashville, Tenn. From Nashville take route 313 to Mammoth Cave, Ky., then route 140 reversed to Louisville. From Louisville take route 129 reversed to Cincinnati, Ohio. Take route 128, Cincinnati to Lima, Ohio, following this by route 102 reversed to Cleveland.

From Cleveland take route 102 again to Lima, and then route 118 from Lima to South Bend, Ind. From South Bend take route 160 reversed to Chicago.

Pontiac can be reached from Detroit. From Lima take route 122 reversed to Toledo, then route 111 reversed to Detroit. From Detroit proceed as follows: Highland Park 5.0; Royal Oak 12.0; Birmingham 16.5; Pontiac 24.5 miles. Roads fine to fair, level with some gravel.

CINCINNATI TO CLEVELAND.

E. A. WHEELER.—See the Touring Number, page 32 for route 128, Cincinnati to Lima, Ohio. See page 28 for route 122, Toledo to Lima, which follow reversed. That is, call Lima 0.0; Beaver Dam 10.0, etc. From Toledo take route 104 (page 26) reversed to Cleveland.

THROUGH NEW ENGLAND FROM NEW YORK.

LUDWIG FLACH.—See route number 39, special Touring Number, New York to Hartford, via New Haven. Follow to Hartford. Next take route 13 to Worcester, Mass. Go to Boston over route 10 reversed. From Boston next take route 2 through Lowell and Manchester, to Concord, N. H. From Concord go to Hopkinton, then to West Hopkinton, Henniker, Hillsboro, Bennington, Hancock, Dublin and Marlboro to Keene. Distance 97.3 miles, fair to good dirt roads. From Keene go to Greenfield via West Swanzey, Westport, Winchester, Hinsdale, East Northfield, Northfield, and Bernards town. Fair to good dirt with a little macadam roads. Distance, 38.6 miles.

From Greenfield go to Springfield, Mass., via Deerfield, South Deerfield, Northampton, Mt. Tom, Holyoke. Roads macadam mostly. Distance, 37 miles. From Springfield join route 13 to Hartford and return to New York as you came out.

NEW FERRY SERVICE.

BROOKLYN, N. Y.—Long Island motorcyclists will appreciate the new Brooklyn-to-Staten Island ferry which was formally opened on July 3. This ferry service eliminates the long roundabout route formerly necessary to reach Staten Island. The "Garden City" will make daily trips at intervals of one hour from the foot of Bay Ridge avenue, Brooklyn, to St. George, Staten Island. The boat will leave Brooklyn on the hour and Staten Island on the half hour. The trip takes eighteen minutes. The ferry service was inaugurated by fifty members of the Bay Ridge Motorcycle Club making the first trip to Staten Island, where a spin was enjoyed.

USE OF CUT-OUT PROHIBITED.

THE touring department of the Automobile Club of America calls attention to the fact that the muffler cut-out ordinance for Greater New York, which was returned by the Mayor April 16, will become operative July 16, and it is believed that so many complaints have been made of unnecessary cut-out nuisances throughout all parts of the city, that the police will be active immediately after the new law takes effect.

A MUNICIPAL GARAGE.

COLUMBUS, OHIO.—The director of safety of Columbus has advertised for bids for the erection of a \$3,000 municipal garage to be located near police headquarters in which will be housed the automobile police patrols and the motorcycles used by the department.

The Barr Motorcycle Company, of Columbus, central Ohio distributor for the Indian, has delivered to the police department three 7 h. Indians to be used in chasing speeders.

A NORTH SHORE ROUTE.

MOTORCYCLISTS of the metropolitan district who have made the trip from the Queensboro bridge plaza to the north shore report that the best road is as follows: Turn left over good asphalt to car barns on right; short stretch of cobbles, then fair macadam through Broadway, rushing to Little Neck. From Little Neck the best road is to Manhasset, Cold Spring Harbor and Northport.

The extension of the Jericho Turnpike from Woodbury east has been opened, and is in good condition as far as Commack. Between Commack and Smithtown the road is still closed, and a short detour is necessary either to the north or south of the trunk road. For through travel this obviates the necessity of running to Cold Spring and Northport; thence through Kings Park to Smithtown.

Long Island Motor Parkway is open between its western terminus and Lake Ronkonkoma, where the Petit Trianon is open to the public. This is the route outlined in a recent bulletin issued by the Touring Bureau of the Automobile Club of America.

WHITE MOUNTAIN ROUTES.

MOTORCYCLISTS who have been over the Boston Post road to New Haven of late report that it is in poor condition, some stretches being extremely rough. From New Haven, however, nearly all the road is very good, through Springfield to Boston. From here it is mostly good macadam to Portsmouth, with some worn stretches.

The roads from Portsmouth to the White Mountains via the Weirs are in fair shape, but they are better via Ossipee and North Conway. If the tourist wishes to go from Portsmouth via Concord and the Weirs, or via Plymouth, the roads will be found good out to Concord via Barrington and Northwood Centre, except for a short stretch in the town of Epsom. From Concord to Plymouth or the Weirs they are fair for so early in the season. From Plymouth there are good gravel roads via Woodstock and the Profile House to Bretton Woods.

On the direct routes from Portsmouth via North Conway the roads are reported in good condition. Between Portsmouth and the Weirs, via Rochester and Alton Bay, the roads are in good shape only in sections.

UTOPIA SOCIAL RUN

Members of Brooklyn Club Enjoy Sunday Outing Over Fine Long Island Roads.

BROOKLYN, N. Y.—The first annual run of the Utopia Motorcycle Club of this city was held on Sunday, June 30, over some of the finest roads on Long Island. This was purely a pleasure trip, all of the features of an endurance run being eliminated. The schedule was an easy one, calling for 18 miles per hour. The route covered a distance of 125 miles. Checking stations were located at Eastern Parkway and Bushwick avenue for the start; Floral Park, Rockville Center, Mineola, Jericho, Massapequa, and at Patchogue, where the dinner stop was made. The return journey was over the Merrick road to Jamaica, then to Brooklyn, where the riders checked out.

There were 21 machines entered in the run, five of which did tandem duty. All of the machines finished on schedule time, thereby assuring the riders of handsome gold fobs. Barring one accident, none of the riders experienced anything worse than punctures. The accident was caused by an open trolley switch.

Captain Louis Decker, riding a 6 h. twin Flying Merkel, with Harry Wilkins as passenger, while passing through the town of Sayville, ran into the switch, which threw them from the machine. Decker was unhurt but Wilkins was not so fortunate. The glass on his goggles was broken, pieces of the glass cut his eye and six stitches were necessary.

Those who entered the run were as follows: John Behn, Merkel 6; Geo. Blaurock, Merkel 5; Otto Cody, Merkel 6; Herman Cordez, Merkel 7; Louis Decker (Capt.) and Harry Wilkins on tandem, Merkel 6; Ed. Daly, Merkel 6; Bill Erath, Merkel 6; Geo. Eckert, Merkel 6; Chas. Frenzel, Merkel 7; John Golz and Charlotte Klenschi on tandem, Merkel 4; Henry Juenger and Mrs. Juenger on tandem, Merkel 6; Ernest Keller, Merkel 4; Chas. Miles, Merkel 6; W. E. Murphy, Merkel 4; T. Monroe, Merkel 6; Willie Pflieger and Anna Pflieger on tandem, Merkel 6; Ed. Minden, Merkel 6; Ed. Steiger, Merkel 6; Harry Wiggins, Merkel 6; H. Wilkinson, Merkel 6.

The checkers of the course were Louis Decker, Charlie Keonig, Fred Williams, Bill Burkmen, Edwin C. Barhart, and Jimmy Frederick.

ALONG THE HUDSON.

RECENT reports obtained by the Touring Bureau of the Automobile Club of America are to the effect that 90 per cent. of the route up the Hudson river to Lake George is in excellent shape at this time, but tourists should take a few warnings in order to prevent meeting one or two bad stretches of road caused by reconstruction.

It is preferable to cross to the west side of the Hudson river by the 130th street ferry and run through Tuxedo rather than taking route on the east side by way of Tarrytown and cross there, as a hilly detour is necessary on this route between Nyack and West Nyack.

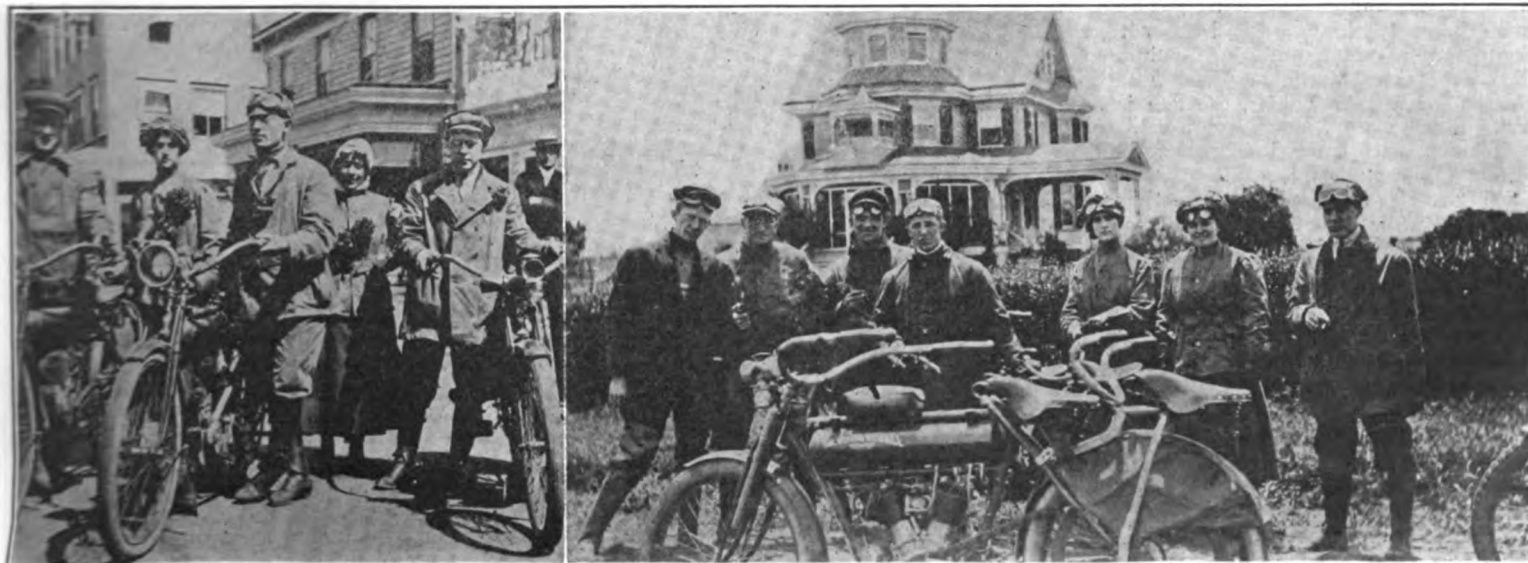
Going by way of Tuxedo a detour will be found necessary between Mahwah and Suffern. This is not posted, and travelers should be careful to turn left at Mahwah under the railroad bridge; turn right at the end of the road; pass a cemetery and turn right at the end of the road; cross a bridge and bear right under the railroad; at once bear left to Suffern.

From Suffern there is a fine road to Newburg, with the exception of about a mile.

At Newburg cross the Hudson on a ferry to Fishkill Landing. From here the route leads over nearly all State road to Poughkeepsie by way of Wappinger's Falls.

From Poughkeepsie to Hyde Park nearly all the distance is good macadam. On reaching Hyde Park at about 6.2 miles from the Poughkeepsie another detour is necessary. Turn right to East Park. Turn left at the end of the road and go straight on to the end of the road; turn right on to an excellent State road, and follow the same through Phinebeck, Red Hook, Blue Store and Hudson. Three miles from Hudson macadam is worn for a distance of about two miles, then the travel is over good macadam through Stockport, with a slightly rutty stretch entering Stuyvesant Falls. It is also rough and rutty for about one mile entering Kinderhook, and then good to Albany.

Leaving the Capital of the State, follow fair pavement, passing the State House and running on Northern Boulevard for about one mile. At the end of the Northern Boulevard there is good asphalt and brick and macadam through Cohoes, Waterford and Mechanicsville. Very good macadam to Saratoga.



Some of the Riders and Tandemites Who Went on the Utopia Club's Run.

APPLEBEE WINS SENIOR TROPHY RACE

Scott Rider Springs Surprise by Capturing English Classic on Two-stroke Machine; Bashall, Mounting 2 3-4 Douglas, Takes Junior Event—Rain Hampers Belt Drivers

By BRITISHER

SOME people pretend that motorcycle engineers can learn nothing from racing; but the 1912 Junior Tourist Trophy Race is likely to be famous in history as having affected a revolution in transmission designs. At first sight the race seemed a trumpery little affair. There were only 25 original entrants, and the list shrank to 20 starters on the race day. A trade abstinence bond debarred most of the crack trade jockeys from turning out; and on paper the trophy seemed to be a gift for the Humber Company, which won all the top places in 1911, getting their complete team of six riders through to the finish. Such unappetizing fare scarcely afforded sufficient inducement for our representatives to face the 80 miles of choppy sea which separate the island of tailless cats from the mainland. However, Fortune is a capricious jade, and as luck would have it, not one of the five Humber machines ever figured in the race or even finished as an "also ran," while the technical teaching of the race is so simple and direct that its influence will be visible on all the best British machines in 1913.

I will tease your speculative faculties no longer. Let me be brief. During the month prior to the race it had rained nearly every day, as it only can rain in Manxland, and especially did it pour all the day before the event. The race day itself opened fine, with sun and wind exerting miraculous influence on the sodden roads, but just as the first men started, a gigantic rainstorm burst, and in five minutes the entire course was streaming and shining with surface water. As a consequence, the belts were soon soaked, and every rider who was using a straight-through direct belt drive from engine pulley to rear wheel rim found himself in awful trouble, for rubber belts, when wet, slip over a steel pulley like a Wall street magnate over a banana skin. A few cute spirits had looped leather belts round their waists, and managed to struggle on until the wet stiffened the leather to the likeness of a poker, and the far-flung grit glazed the sides of the rawhide. Of those who had only rubber belts, the tale is soon told. Last year's winner stopped 17 times in 60 miles with a one-inch rubber belt, in perfect adjustment and condition, absolutely refusing to bite on his pulley. Another rider said that while his wheels had done one lap his engine had done three. At any rate the rain only lasted for two-thirds of the first lap, after which not another drop fell; but that half-hour's downpour destroyed the chances of all the direct-belt-driven machines; when the sun shone out again, not one of them had a dog's chance of finishing.

Chain-drivers were conspicuous by their absence, and so the British motorcycling public is not compelled to reconsider a transmission against which it is so strongly prejudiced. A type of transmission which is practically unknown in America, and which is yet to sweep the field in England, emerged from the strenuous conditions with superbly victorious credit. From start to

finish the victory lay within the grasp of the Douglas team. Now the Douglas engine, gearbox and details are no whit superior to those of several other premier 2 3-4 h. machines, the Humber for instance, but it was their transmission that primarily secured their triumph. The drive goes from the engine to a countershaft gearbox by a chain, which may be totally enclosed in a light aluminum shell of detachable type. Any reasonable gear-reduction can be obtained between the sprockets. This allows of a belt-pulley of as much as 8 inches in diameter being mounted on the countershaft, whence the drive is by belt to the normal pattern of wheel rim. The Douglas belts, thanks to their large countershaft pulleys, gripped like a chain or a propeller shaft.

It is positively certain that if the T. T. races are continued, practically every British machine that competes in future will have the combined drive; and it is probable that most of our best roadsters will adopt it for 1913. A revolution of transmission is in progress, and I should not hesitate to prophesy that the American industry, now coquetting between chains and belts, will profit by considering the combination. I stake my personal reputation on the historic importance of this scathing exposure of the direct belt drive, and on the certainty of the "combination" drive topping

our market against the best chain drive ever invented.

Result.	Machine.	Hr.	M.	Sec.	Speed.
1. W. H. Bashall	2 3-4 Douglas	3	46	59	39 m.p.h.
2. E. Kickham	2 3-4 Douglas	3	51	36	38 m.p.h.
3. H. Cox	2 3-4 Forward	4	6	29	36 m.p.h.
4. J. Stewart	2 3-4 Douglas	4	29	4	35 m.p.h.
5. P. Owen	2 3-4 Forward	4	31	54	35 m.p.h.
6. R. Ellis	2 3-4 Nut	4	32	26	33 m.p.h.

Five other riders finished in slower times.

Returns on the Senior Tourist Trophy event are not as yet complete, but the winner and second man are announced. F. A. Applebee, mounting a 3 1/2 h. two-stroke Scott, carried off the laurels, while J. R. Haswell, a private owner, came second on a 3 1/2 h. single belt-driven Triumph. The Senior race result was very surprising to most prophets; the Scott riders were looked on as possibilities only, but Applebee rode his water-cooled, side-by-side cylindered mount to victory with the Triumphs fighting him hard. Applebee's machine has two speeds, drop frame and chain drive, while the Triumphs were fitted with three-speed hub gears and V-belts.

BIG CAPITAL INCREASE.

COLUMBUS, Ohio.—The final steps in the merging of the Diamond Rubber Company with the B. F. Goodrich Company were taken recently when application was made with the secretary of State for permission to increase the capital stock of the latter corporation from \$45,000,000 to \$90,000,000.



HOT FINISH AT DENVER.

IN the accompanying photograph, showing a hot finish on the Tuileries saucer in Denver, Cox, mounting a Flying Merkel, has just nosed out Boyd, the Indian speedster. It is

worthy of note that Bowen, in third position on a Merkel, has ridden the last mile on a flat tire. Close finishes have been the order of the day at Denver for some time past, and the fans are showing their appreciation by turning out in large numbers to every meet.

QUESTIONS and ANSWERS

IN order to add interest and value to this Department, an entirely new feature was announced in the June 27 issue. The Editor will, as heretofore, answer all inquiries to the best of his ability. In addition, however, he will in each issue propose a question of his own, and invite the readers of *MOTORCYCLE ILLUSTRATED* to test their ingenuity and mechanical knowledge in answering them.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most thoroughly characterized by clearness, accuracy and brevity. A new question will appear

in each issue. Answers will be published the *second* issue following the number in which each question is asked. For example, answers to the question originally published in the June 27 issue, and repeated below, will be printed in the issue of July 25. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York."

Question No. 1.—Define, briefly and accurately, the general design and operation of a carburetor. Answers to this question will appear in the next issue.

Question No. 2.—Describe, so that a novice will understand, the construction and functions of a spark plug. Answers to this question will be published in the August 8th issue.

MERRITT

PATENT INFRINGEMENT.

PATENTEE.—The usual defense of an alleged infringer or of the defendant in such a case would be the lack of validity of one or more of the claims of the patent. Thus, if the device was manufactured in public, whether sold or not, at least two years before the patent was granted, the courts would hold that the claim of originality was valueless. If the device was described or mentioned in a periodical so that the nature thereof would be clear to the average mechanic over two years before the application for the patent, a ruling of like nature would also be made. Any patent to be valid must show originality in its application to the industries, if it is of the class under which yours comes, and this applies also to patents for processes (gold refining, mixing carbon with iron in certain proportions along with other metals or metalloids, etc.). If, however, the device were made in secret, and only the workmen necessary to the manufacture thereof were cognizant of its nature or manufacture, there could be no defense as to lack of originality.

In a patent specification, the claims are found near the beginning of the specification and also in full at the end thereof. But there is no bar at present to a patentee making claims which are only partially correct and true as to their originality. Thus, in a patent for a device forming part of a spring fork, the claims for the entire fork construction as a mechanism could be made, but the specific device (a link or rocker) only would be recognized as valid by the courts in a case of infringement, the other members being accessory thereto and having no weight as regards

originality. But in many cases, threat of suit for infringement has been sufficient to cause cessation of the parties said to be infringers from manufacturing or marketing the device without recourse to law. See a good patent lawyer.

MOTOR MANUFACTURERS.

STIERLE BROS.—Following are makers of motorcycle motors: Waverley Mfg. Co., Waverley place, Jefferson, Wis.; F. W. Spacke Machine Co., Indianapolis, Ind.; Shaw Mfg. Co., Dept. 26, Galesburg, Kans.; Aurora Automatic Machinery Co., Chicago, Ill.; Sun Motor & Supply Co., 307 Amsterdam avenue, New York. The R-S machine is made by the Reading-Standard Co., 306-340 Water street, lawyer, as the patent laws are, to say the least, rather complicated.

A PATTERSON BOOMER.

FRRIENDS of Dr. B. J. Patterson, of Rexford, Kan., are leaving nothing undone to boost him for the Federation presidency, and the letter printed below is indicative of the enthusiasm with which riders throughout his territory are looking forward to the Columbus convention. P. E. Zimmerman, F. A. M. commissioner at Lindsborg, Kan., writes as follows:

"A recent article referring to Dr. B. J. Patterson as the only avowed candidate for the office of president of the F. A. M. was good news to that part of America situated west of the Hudson river, as it was in such marked contrast to the attitude of one of the Eastern motorcycle

journals which referred to the doctor's candidacy as 'something local,' intimating that it was confined to the prairies of Kansas.

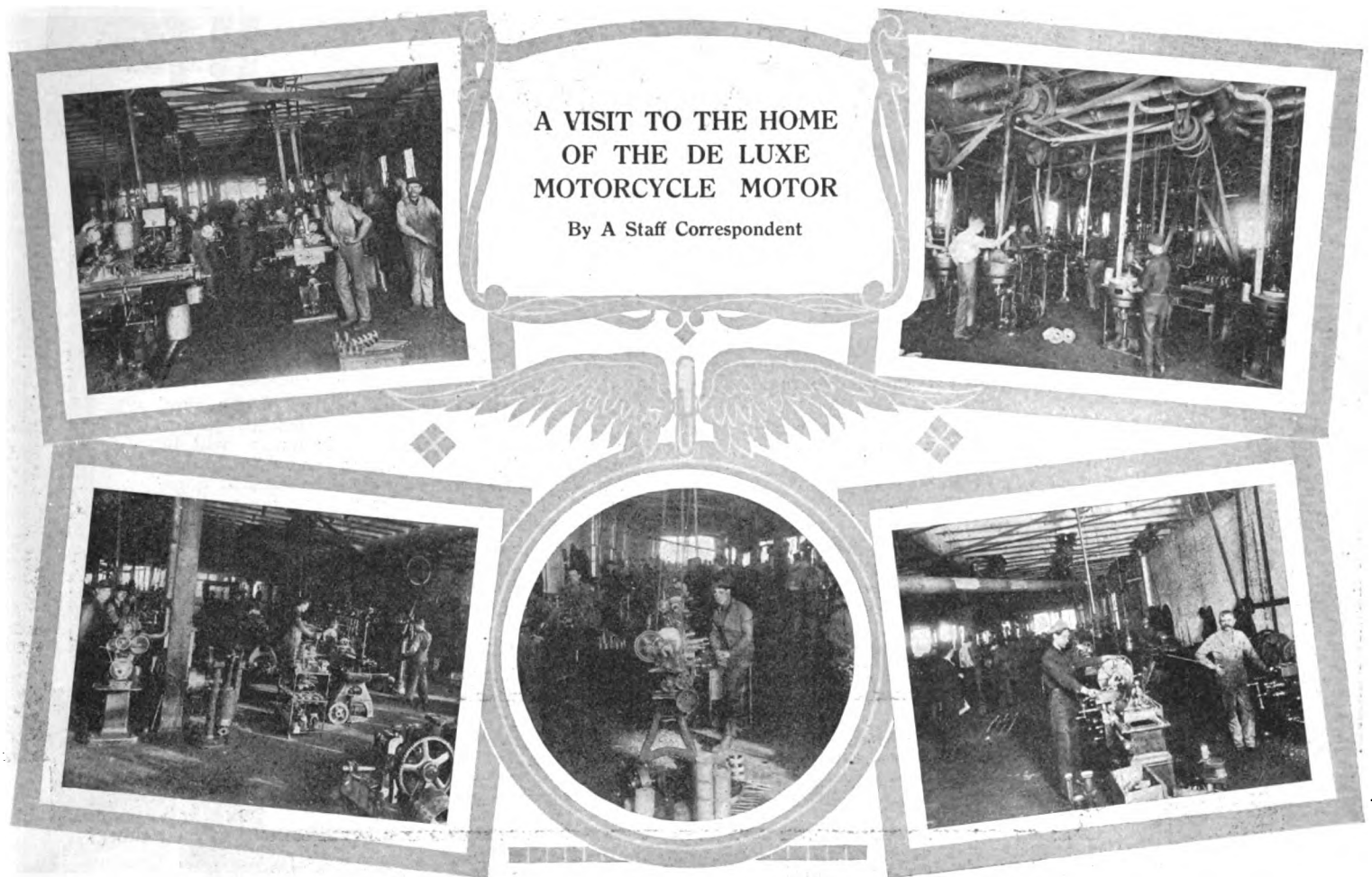
"The fact of the matter is that Dr. Patterson, by every line of reasoning and system of logic, is the logical man to head this great organization. He has no ax to grind; has done more for the F. A. M. than possibly any other man in it, and it has been strictly a labor of love on his part. He is the very exemplification of unselfishness; and if there is any place on earth where such a qualification is imperative, it is the presidency of the F. A. M.

"Dr. Patterson is no uncertain quantity. He is time-tried and tested. And the big things he has done make him tower head and shoulders above the ordinary aspirant for the executive position. If left to an open vote of the riders of America, the result would be certain.

"Here's hoping that all the good scouts from Chicago, Los Angeles, Savannah, Denver, Rochester, Columbus and other great motorcycle centers get behind the candidacy of Dr. Patterson at that Columbus convention, and boost him into the presidency, where he belongs by all the traditions of the game."

IOWA GOOD ROADS SCHEME.

DES MOINES, Iowa.—The Polk County Good Roads Club, of this city, is adopting a novel plan to get the roads in better condition. Membership costs \$2, and every member is given a small, round shield to wear on the front of his machine.



A VISIT TO THE HOME OF THE DE LUXE MOTORCYCLE MOTOR

By A Staff Correspondent

HAVING seen and heard so much of the De Luxe motorcycle motors, I was desirous of knowing, at first hand, something of the factory and the manufacturing methods used in the making of these motors, and on a recent visit to Indianapolis I visited the plant of the F. W. Spacke Machine Co. I had no letter of introduction, but found these people easy of access. When my mission was learned I was turned over to a gentleman who showed me the plant in a very thorough fashion, and I will endeavor to give my general impressions of the visit.

In the first place, as a matter, perhaps, of historical interest, the F. W. Spacke Machine Co. has been engaged in the manufacture of automobile motors and automobile motor parts ever since self-propelled vehicles have been known. The company therefore has a plant and organization second to none for the turning out of the high-class work necessary to make a successful motorcycle motor, and at the same time their facilities are such that they are able to produce these motors in large quantities. The factory is one of the most compactly arranged and complete plants I have ever seen. Only the most modern and the highest class of machine tool equipment is used, such as massive grinding machines for inside, outside and flat grinding and accurate gear hobbing machines for generating the teeth of gears. The equipment of this factory consists of a total of three hundred machine tools.

The working conditions in this factory are up to the highest standard of present-day successful manufacturing, as great care is taken to provide the men with comfortable surroundings and every reasonable precaution for safety

in their work. The result is that this factory reminds one of a bee-hive wherein everybody is working to their utmost to do their part in the making of De Luxe motors.

The work of manufacturing is carefully scheduled from the initial operations on the raw materials to the final inspection and exhaustive block tests of the finished product. The raw materials are first received in the spacious receiving department where they are checked in and carefully inspected to see if they are up to the high standard set for material entering into De Luxe motors. From this department the material is taken to the various manufacturing departments, and every step of this journey is carefully watched to see that the quality is properly maintained. In the manufacture of a particular product, such as a motorcycle motor, many high-grade methods are introduced and I notice that these people finish all parts wherever possible by grinding. This is not only an economical way of manufacturing, but means that all such parts are more accurately finished and better finished.

Another point of interest to me was the method employed in the cutting of the spiral timing gears used on this motor. Not only are blanks for these gears ground to correct outside diameter, but they are also cut on self-generating automatic gear hobbing machines. The function of these gear cutters is to accurately generate the form of the gear tooth, which means that De Luxe gears are theoretically as well as practically correct. Then, too, the grinding of cylinders, pistons, piston rings and piston pins are interesting processes, and it will surprise any one to know the extreme closeness of size to which

all of these parts are made. In fact, in all of this manufacture an extensive system of jigs is used as well as close size limits maintained and the result is that the De Luxe motors are entirely interchangeable. The photographs accompanying this article represent partial views of the manufacturing departments of this factory.

From the manufacturing section all parts, after proper inspection, are taken to the various assembling divisions as noted by the other photographic illustrations. The departments are very extensive. Here the motors are put together by skilled men, and after they have been carefully adjusted the motors are delivered to the testing department. Upon coming to this division of the factory, I was first impressed by the terrific din, due to the open exhausts, which greeted my ears and the thought that such a place would be a heaven for the open muffler fiend. There is, however, a reason for this noise as by this means any inaccuracy in motor explosion or operation is detected.

Before the motors are given their power tests they are run by belt power so as to limber them up. After an extensive "limbering up" run the motors are mounted on a stand for power tests. In order to determine that these motors are properly producing their full power capacity, they are connected to an electrical dynamometer which is nothing more or less than an electrical generator provided with a suitable means for recording the horsepower developed. During a long period of power operation a continuous reading is taken of the horsepower output of each motor. Every motor must show a uniform power development which, of course, is far in excess

of the normal rating of the motor. Each motor is run under power tests with a magneto, carburetor and spark plug with which it is shipped and thus, when a motor leaves this factory, it is properly adjusted and ready to run without further change.

After each motor receives its test O. K. it is taken to the inspection department for final examination and approval. From the inspection department the motor goes to the shipping room, where it is carefully wrapped in a cotton sack and then, in turn, packed in a closed box surrounded by excelsior. This insures that the customer will receive a motor entirely free from damage to the fine adjustments necessary for its successful operation. Another thing which impressed me was the scientific methods employed by the F. W. Spacke Machine Co. in putting out De Luxe motors. Their engineering department is constantly figuring and experimenting with the various phases of motor operation, with the result that they have established a comprehensive list of tables showing the horsepower outputs of these motors under all conditions, their torque and various other things of scientific interest. In fact, the F. W. Spacke Machine Co. has brought to bear in the production of these motors all of their knowledge as gasoline motor experts, and it is not at all surprising to me that they have achieved such marked success.

With their large facilities, they are figuring

motorcycle motor manufacturing plant in the country.

SPEAKING OF ADVERTISING.

WITH Excelsior agents on all sides pleading for rush shipments of machines, Advertising Manager Aleck G. Whitfield, of the Excelsior Motor Manufacturing and Supply Company, has the best of reasons for knowing that publicity in behalf of a reliable product is the breath of business life, but that doesn't prevent him from making some straight-from-the-shoulder remarks anent the type of advertising which fires a broadside of adjectives regardless of facts.

"Reasonable advertising should be encouraged by every legitimate means," says Mr. Whitfield, "but whether a man is boosting a motorcycle or a steamship he should have facts to present—and present them. The buying public, on the other hand, should expect these facts and demand them. In all lines most of us must plead guilty to a hungering for the greatest possible returns with the least expenditure, but even this tendency should not lead us beyond the bounds of reason. There must be a limit to our credulity lest we go to the extreme of enthusing over a more or less humorous motor description which recently appeared in *Gas Review*.

The author of the article referred to was dwelling upon "A Mistake of Advertisers"

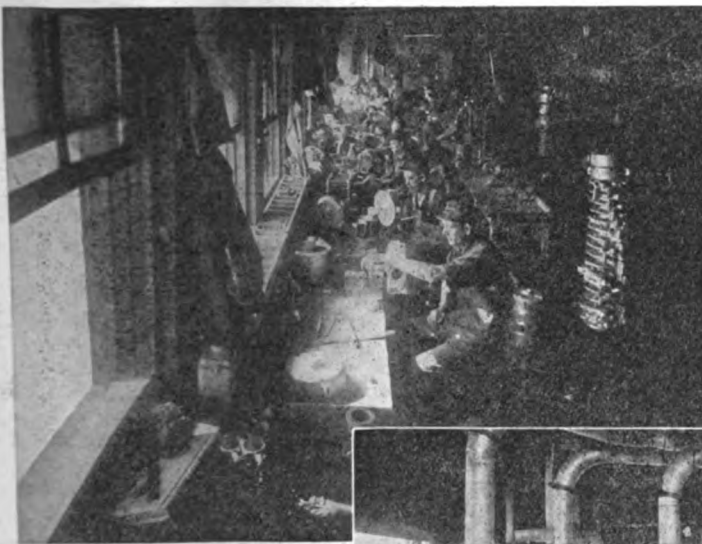
when he wrote as follows: "They tell us that a certain engine will do all our work and take care of itself; that it needs no foundation to stand on; that any convenient snowbank will do, and, if that is not handy, it will do its work resting upon the hot air of the advertisement which sold it; that it requires no attention beyond a half-hitch at the fly-wheel once or twice in two or three weeks, and a quart can of good engine oil set on the windward side of it; that the only fuel required is an occasional whiff of alcohol fumes from its owner's breath; that no repairs are ever needed and that the only engineer required is a babe in arms or a schoolgirl."

PETITION FOR EXTENSION.

CREDITORS of the Pierce Cycle Company, of Buffalo, N. Y., have received notice that Lawrence P. Hancock, trustee of the company, has filed a petition requesting that an order be made to continue the business in the ordinary course of trade for not more than sixty days from June 10. The petition is in the hands of Referee Barber B. Conable.

HOW THE BOOM GROWS.

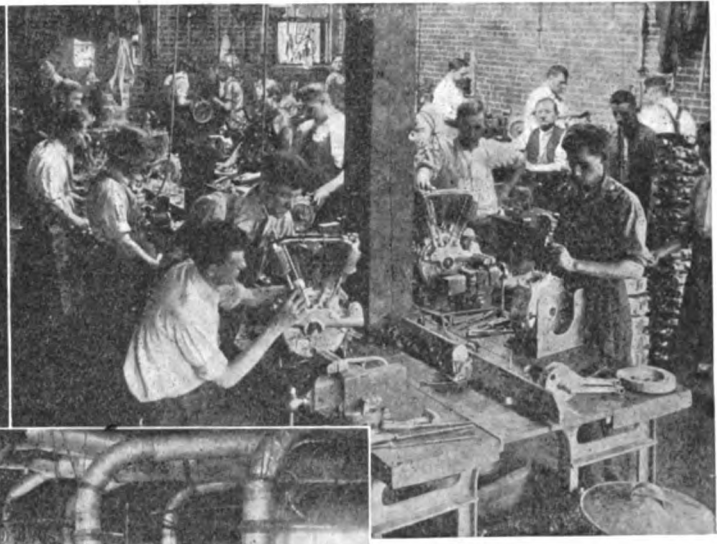
THAT there has been no falling off in the motorcycle boom, which is now sweeping the country, is evidenced by a



Assembly Room.

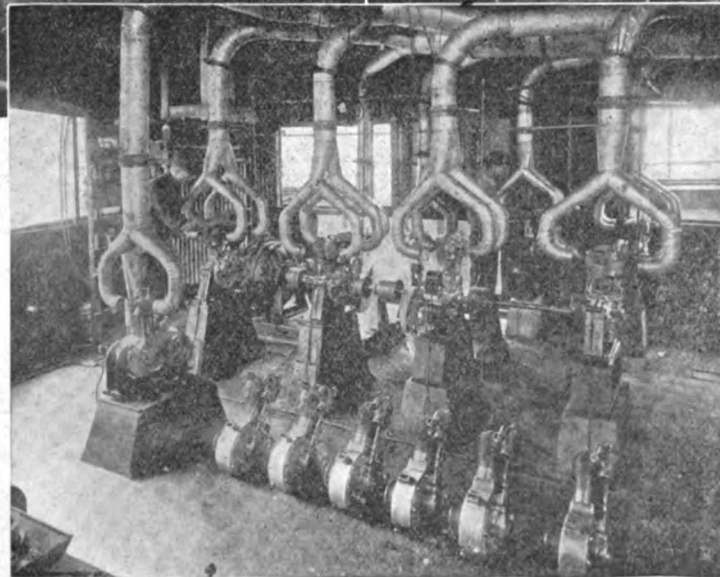
on a big production for the forthcoming season, and they tell me that this output is, at this early stage, practically sold. De Luxe motorcycle motors are being built in four sizes: 4 h. single cylinder, 5 h. single cylinder, 7 h. twin cylinder and the large 9 h. twin special motor which has attracted so much attention.

Little did I know when I entered this plant, of the vast detail and energy devoted to the manufacture of motorcycle motors, but I now have a new and accurate conception of the largest and most up-to-date



Assembly Room.

recent report from the Hendee Manufacturing Company. The Wigwam officials opened the season by counting upon a demand for about 13,000 Indian machines, and up to the evening of June 29 the actual delivery of Indians was a trifle over 15,000 machines. In other words, the sales had run 2,000 machines beyond the outside estimate of the company, with the season only about half gone. The Hendee company states that its orders are piling up as rapidly now as they did during the spring.



Testing Department, F. W. Spacke Motor Co.

NEW BOSCH FACTORY ON MODEL LINES

Big Springfield Plant, Designed to House 1,000 Workers, Has Every Improvement Calculated to Increase Efficiency and Comfort of Its Magneto Experts—Nucleus of Mammoth Establishment.

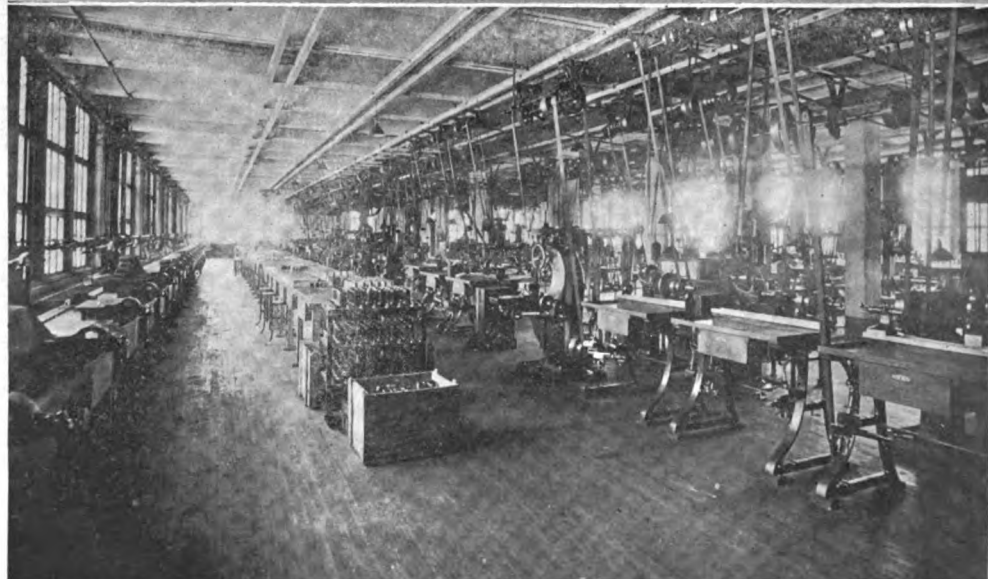
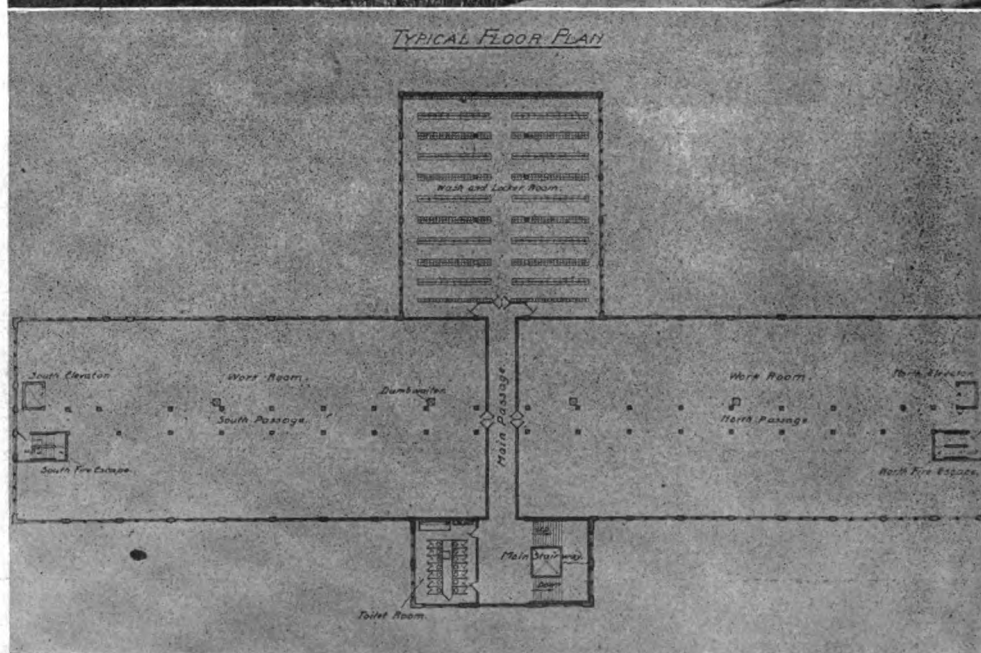
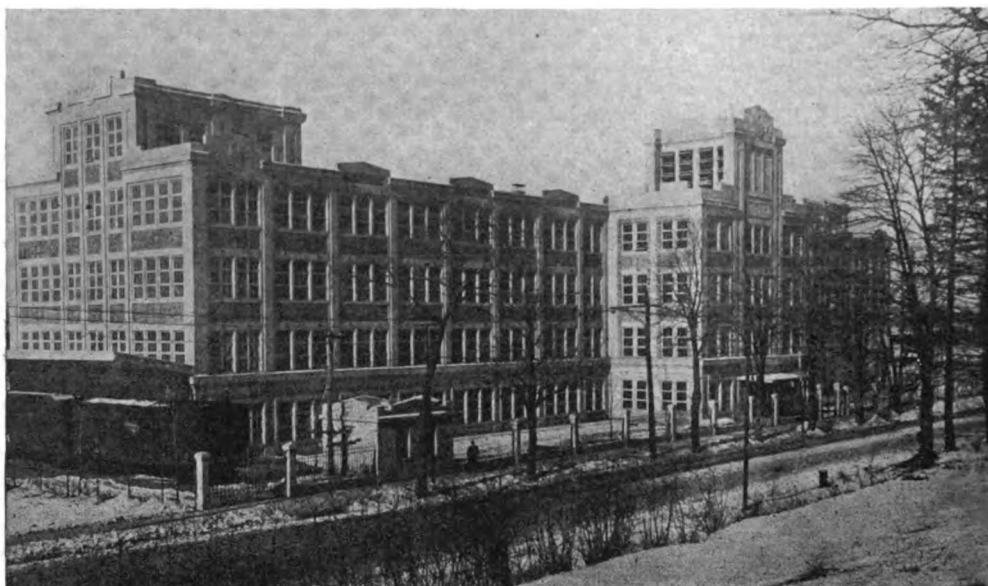
L AID out along lines which insure economy in operation, a perfect system of collaboration in the various departments and a wonderfully comprehensive policy as to tests and inspections, the new factory of the Bosch Magneto Co., just finished at Springfield, Mass., stands as substantial proof of the firm's claim that its establishment as well as its products must rank high. In the buildings now constructed one thousand workers will be surrounded with conditions such as to enable them to give their skill its best expression and to produce only such work as will be in keeping with Bosch standards. Carefully prepared schemes for heating, ventilating, sanitation and general efficiency have been worked out by those who planned the structures so that absolute order and cleanliness will automatically prevail. Nor were the arrangements limited to present needs, but on the contrary the buildings now in use are but the nucleus for a prospective group that will house more than three thousand workers.

The site is on North Main street in the city of Springfield, the home of several active automobile enterprises, and is so located that the factory has direct rail connection, by means of a side track of the Boston & Maine Railroad, with the railroads of the country. In addition to the main or manufacturing building the buildings now erected include a power house and boiler house in addition to a number of small temporary ones. The manufacturing building is of a cross shape plan with four stories, each 13 feet 6 inches high, and contains the shops and factory offices. It is 315 feet long and 66 feet deep with the length extending north and south on Main street.

The east or front section, setting at right angles to the length of the building, houses the main entrance, main stairway and toilets, while the west or rear section contains the wash rooms and locker rooms. The intention is to add one wing extending from east to west on each end of the main building and to complete the square with a building similar to that now erected. In that way the buildings will form a large block with two light courts. The buildings are of reinforced concrete construction.

The machine tools are arranged for group drive. The mainshafts are about 60 feet long, each being driven by an induction motor of 10, 15 or 20 h. The power for the motors is transmitted by a 2-phase, 4-wire, 60-cycle, 440-volt system. Located in the power house is a private power plant in the course of erection, consisting of a 280 h. Diesel engine connected to a 200 K. W. Westinghouse generator which will furnish current for both power and light. When this plant is completed it is intended to use the present outside supply as a reserve.

The high tension cables of the electric light company do not enter the main building, the current being transformed from 5,400 volts to 440 volts by oil transformers, placed in a small building near North Main street. The current is carried by cables from there through the underground conduits of the main building into the power house where the central switch-board for power and light is located. The photographs herewith show (1) A general view of the new factory; (2) a typical floor plan, and (3) a section of the parts manufacturing department.



MANUFACTURERS

SETTING LIVELY PACE.

SO broad has been the demand for the attractive new catalog of the Chicago Cycle Supply Co. that the first edition, which was expected to cover the entire dealers' list, has already been exhausted, and it has been found necessary to have 2,000 extra catalogs printed. What's more the catalogs are bringing returns. President Hanson reports that the factory staff has been working in special shifts on nights and Sundays for some time past to keep abreast of the orders. The extra floor which the company intended to rent when it first occupied the building is now needed for the firm's own business so rapidly has it expanded of late.

H. E. Kenyon, formerly connected with the Excelsior Motor Manufacturing & Supply Co., is now with the Chicago Cycle Supply Co. as assistant to President Hanson, and Mr. Ash, formerly with the Hine Watt Co., of Chicago, has been taken on as a traveling representative in Western territory.

TWO EXTRA STORIES.

DESPITE the fact that an extensive addition was made to the Hendee Manufacturing Company's plant in Springfield last winter, it has been found impossible to keep abreast of orders for Indian machines, and as a result further additions are now being made to factory No. 3 of the big plant. The present building is three stories high, and two extra stories are to be placed upon the entire structure. Two large towers are also new; the larger one accommodates a freight elevator and stairways, and the smaller tower has lavatories on five floors and a large protected tank in the sixth story. These improvements will add over 20,000 square feet to the building's floor space.

EXTENSIONS NEEDED.

NEW equipment recently installed in the spacious factory of the Empire Tire Company at Trenton, N. J., will permit the company to more than double its output. A large force of tire experts is now working at top speed to meet the demand for Empire products. President Charles H. Semple is well remembered by all the veteran bicycle and motorcycle riders in this country, as he has been an enthusiastic booster of the two-wheeler, motor or no motor.

A BIG MOTOR ORDER.

THE Great Western Manufacturing Co., of La Porte, Ind., has placed an order for 1,000 Spacke motors. The company contemplates manufacturing motorcycles for 1913, and it is understood that a formal announcement of its plans will soon be made.

BIG GOODYEAR ADDITIONS

Will Increase Capacity of the Already Extensive Plant from 5,000 to 8,000 Tires a Day.

EXCAVATIONS are being made for another monster building at the Goodyear Tire & Rubber Company's plant, Akron, Ohio. This addition to the present great factory group will be 400 feet long and 80 feet wide. It will be six stories high, with basement, and will be made as nearly fireproof as possible. The Goodyear company is also adding two stories to two of the present buildings. Each of these buildings is 450 feet long and 60 feet wide. The new buildings and the two new stories will give the plant additional floor space of 266,000 feet, making in all a total floor space of 1,266,000 square feet.

The additions and the new building are being erected for the purpose of taking care of the increase of the tire business, and the enormous output of Goodyear No-Rim-Cut tires and other popular lines. At the present time the Goodyear Tire & Rubber Company is turning out 5,000 tires a day; the new buildings will enable the company to turn out 8,000 a day.

The company employs 5,000 men, but when the new buildings are completed employment will be found for 2,000 additional hands.

VISITORS AT MERKEL PLANT.

AMONG recent visitors at the plant of the Miami Cycle and Manufacturing Company in Middletown, Ohio, were A. C. Edwards and Lawrence Kunle, who rode down from Columbus on their Merkel sixes; George Reisinger, of Anderson, Ind., who made the trip to Middletown on his belt-driven Merkel 6; Gomer Walters and John Walters, of Buffalo; A. D. Rivers, of Toledo; T. E. Johnson, of Lima; F. McCarthy, of Detroit; William G. Pierce, of St. Louis; Orvis K. Newby, of Kansas City, and John E. Merz, of Indianapolis. Merz rode down from Indianapolis in the early morning hours, covering the distance of about 100 miles in less than four hours.

THE "SILVER LINING."

THAT the old adage with reference to clouds and silver linings is not without modern applicability is proved by the recent experience of President Heitger, of the Heitger Carburetor Company, of Indianapolis. After a sojourn in a hospital following an operation for appendicitis Mr. Heitger returned home to be greeted by a brand new baby which arrived at the Heitger residence on Sunday, June 23. It goes without saying that the head of the well-known carburetor firm at once became a cheerful convalescent.

"ALIVE WIRE" STILL BUSY.

FOLKS throughout the country who keep a business eye on the newspapers and magazine these days—and there is a mighty big family of us, by the way—are getting so well acquainted with Alive Wire, the advertising philosopher who figures in the publicity campaign of the Miami Cycle & Mfg. Co., that they would no doubt feel a bit lonesome without him. Just where Alive Wire "lives, breathes and has his being" is a small matter; the fact remains that he is whooping along joyously, turning up in print regularly, delivering straight-from-the-shoulder business arguments and getting results. He is never without something to say anent Flying Merkel motorcycles and that he says it interestingly and convincingly is evidenced by the number of his friends. Alive Wire is a booster, coming and going, as his name implies, and when not talking Flying Merkel machines exclu-



sively he is booming motorcycles in general. His headquarters is at the Herbert M. Morris Advertising Agency, in Philadelphia, Pa., but he does not consider it an unusual performance to whoop things up in the print of half a hundred newspapers and magazines all over the country on the same day. In the accompanying illustration he is merely calling attention to the fact that he is still "in the ring."

AN attractive catalog, telling the story of Simplex side-cars, is now ready for distribution by the Simplex Machine Co., of Forty-sixth street and Sixth avenue, Brooklyn, N. Y.

SHIPPING FIRST TRIUMPHS

Recently Organized Detroit Company Swings Its Plant into Operation in Record Time.

THE Triumph Manufacturing Company, of Detroit, organized last April for the production of the Triumph motorcycle, has made such splendid progress in the innumerable details of factory organization that the first machines will be shipped this coming week. Two thousand motorcycles are now passing through the busy plant at 51-55 East Woodbridge street, in lots of fifty, and within a few days dealers throughout the country will be receiving their first allotments. To bring this about the men at the head of the company have been working night and day for several weeks, and they now feel that they can almost take a long breath. The establishment of an entirely new plant, the installation of machinery, the gathering of tools and supplies, the details of factory organization and sales plans combine to make a large undertaking; but the task has been achieved successfully in record time.

The officers of the Triumph Manufacturing Company are: President, Robert M. Brownson; vice-president, C. C. Wormer; Muir B. Duffield, secretary; and George W. Sherman, treasurer. Mr. Brownson and Mr. Sherman are men of vast practical experience in the automobile and motorcycle business.

The Triumph Company is turning out two types of motorcycles, a single cylinder one-speed model and a two-speed model. The first develops $5\frac{1}{2}$ horsepower; the second model gives 10 horsepower to use where the going is rough and the hills are steep. The first is equipped with pedals; the second is equipped with running boards instead of pedals and is started and controlled like an automobile. Both feature a special and exclusive type of front forks and a "no jolt" seat which is covered by broad basic patents. The Triumph includes a Bosch armored type magneto. The $5\frac{1}{2}$ h. motor has a bore of $3\frac{1}{4}$ inches and a stroke of $4\frac{1}{4}$ inches. The two-speed model is of the planetary type, and has no gears working on the high speed.

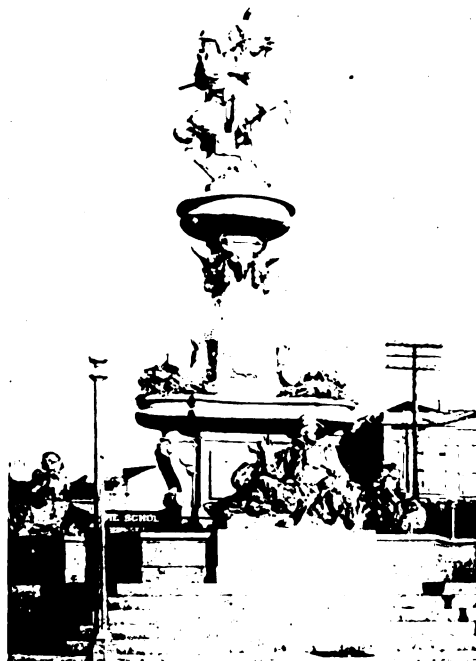
A LIVELY JERSEYITE.

NORMAN E. HEIL, Flying Merkel agent in Paterson, N. J., and one of the liveliest motorcycle boosters in and about the New Jersey city, recently managed to remain in a given spot long enough for a camera man



Norman E. Heil.

to snap him. The picture reproduced herewith is the outcome. In addition to being an enthusiastic agent, Heil is a consistent pluggier in endurance runs and seldom misses one in his section of the State. In the endurance contest of the North Jersey M. C., of Paterson, on June 24, Heil carried a lady passenger on his tandem attachment and went through with a perfect score. Harvey Snyder and W. Heil, two other Merkel riders of Paterson, also scored perfectly.



PIONEER MONUMENT.

THE center of the motorcycle trade in Denver. The Flanders agency is directly across the street; Thor, a half block south; Indian, one block north; Excelsior, one block south; Merkel, three blocks north; Pope and Pierce, one and one-half blocks north.

DENVER TRADE NEWS.

W. E. JOHNSTON, manager of the local Hendee Mfg. Co. branch, has just returned from a visit to the factory. He was successful in securing the shipment of a number of machines to the Denver branch, but on his return he found that the boys he had left in charge of the establishment had disposed of all the new machines.

The Pettie Cycle Co. has taken the agency for Pierce and Pope motorcycles and reports that "the game looks good."

The Carstarphen Electric Co. has opened an agency for the Flanders, placing Harry Good, the motorcycle racer, in charge.

Walter Whiting, Harley-Davidson agent, has racing aspirations and is fitting up a ported seven, which will be ridden by Curly Fredericks.

Old Man Brown, a veteran of the game, and Denver agent for the Merkel, states that sales are fine, but that shipments are a bit slow.

Fred Williams, Thor agent, has not yet received a 1912 model, but expects to get in a few during the next week.

The Emblem agency in the far northern part of the city and the New Era agency in the extreme southern portion are making steady sales.

NEW MANAGER NAMED.

SIX hundred employees of the Aurora Automatic Machinery Company, of Aurora, Ill., and their foremen, who left the plant on Monday, July 8, because of the reinstatement of former Manager Daniel E. Cary, returned to work on Tuesday after Cary had resigned. The men who quit compose the entire day force at the plant.

Mr. Cary was reinstated at the request of former Mayor John P. Hopkins, of Chicago. As soon as it became known that he would assume charge of the plant again, First Vice-President E. N. Hurley tendered his resignation and the men prepared to go on strike. At the conference which followed Cary withdrew and J. D. Hurley, a brother of First Vice-President Hurley, was placed in charge. The big factory is again working at full blast, very little time having been lost through the action of the force.

EBY TO MAKE CEMENT.

HENRY E. EBY, JR., of Fernwood, Pa., sole owner of the formula for the rubber cement in tubes formerly sold under the name of "Quality Rubber Cement," has gone into business for himself and will market this product as Globe Rubber Cement.

ASH JOINS THE RANKS.

SECRETARY JAMES W. ASH, of the Miami Cycle & Manufacturing Co., can ride as well as sell a motorcycle, and he gets as much enjoyment out of one occupation as the other. The accompanying photograph shows him with the machine on which he recently broke into the ranks of single-tracker enthusiasts. Mr. Ash is a veteran bicyclist, but it was only recently that he decided to operate his own motorcycle.



James W. Ash.

MOTORCYCLISTS of Troy, N. Y., rode to Cortland in a body on July 4 where several of their speedsters participated in the races held under the auspices of the Cortland M. C.



Two Interior Views of B. A. Swenson's New Indian Wigwam in Providence, R. I.

A PRACTICAL SUGGESTION.

WASHINGTON, D. C.—W. F. Throop, agent for Haverford machines and one of the best known Washington motorcycle dealers, has his own idea of the proposed action of the post office department in substituting motorcycles for horses and wagons in the collection of mails for the larger post offices of the country. Mr. Throop does not believe this plan will prove entirely successful until the department arranges to have its own repair shops, with a competent man in charge at each post office, and one or two extra machines for emergency use.

As he sees it, the average mail collector who owns his own machine will be inclined, after attending to his postal duties, to use the motorcycle for pleasure purposes and thus subject it to considerable wear and tear, so that in time it might cause trouble. Then, unless a mechanic were available to make repairs and another machine were on hand for immediate use, the mail collection would be apt to suffer, the post master would be out of sorts, and the motorcycle would be blamed.

JENKINS' FINE DES MOINES PLACE.

THIS is the handsome new home of Jenkins & Co., Iowa agents for the Excelsior and Indian. The new building is 50 by 82 feet. Of the total floor space, Jenkins & Co. use 6,600 square feet for show room, garage, offices and repair shops. The building is located at Twelfth and Locust streets, Des Moines, Iowa. The club rooms of the Des Moines Motorcycle Club are on the second floor. F. R. Jenkins, president of Jenkins & Co., and State F. A. M. commissioner, is promoter of the new building. It is one of the finest exclusive motorcycle structures in the United States, and the Des Moines motorcyclists are duly proud of it.

IN MORE SPACIOUS QUARTERS.

FINDING its old quarters unequal to the demands of a rapidly growing business, the California Motorcycle Company, of Los Angeles, Cal., has moved from the corner of Sixteenth and Hill streets to a spacious store at 818 South Main street, within a few blocks of the center of motorcycle activity in the city. The California company handles Eagle and M.-M. machines, and in its new quarters a fully equipped machine shop will be an important feature. In addition to doing repair work the company intends to manufacture a few light motorcycle accessories.



Andrew Lardino's F. A. M. Repair Shop in Jersey City.

REGISTERED SHOPS.

CHAIRMAN ESTABROOK, of the F. A. M. membership committee, reports late additions to the list of registered repair shops as follows: O. & D. Motor Company, 809 Allen street, Boone, Ia.; Solt-Frederick Auto Garage, North Carroll street, Frederick, Md.; Brandenburg & Miller, 228 West King street, Martinsburg, W. Va.; Roscoe N. St. John, 914 Maple street, Rocky Ford, Col.; S. Page, Jr., Waverly, Ia.; E. S. Henderson, 153 Thacher street, Hornell, N. Y.; A. E. Sherwin & Co., 212 North Main street, Goshen, Ind.; Alliance Motor & Supply Company, First National Bank building, Alliance, O.

HARLEY-DAVIDSON STOLEN.

HAGEDORN & WEBSTER, of 206 East Jefferson boulevard, South Bend, Ind., report the theft of a 1912 Harley-Davidson machine from their headquarters. The machine is a battery model, fitted with Troxel saddle, Empire checkered tread tires and engine No. 5178-B. When stolen it was equipped with a nicked Simplex spring carrier. A reward of \$25 is offered for the recovery of the machine.

BYERLY IS ASSISTANT MANAGER.

GUS HABICH has appointed Alex Byerly, former manager of his motorcycle department, as assistant manager of the concern. On July 1 Habich sold two 7 Excelsiors to the Indianapolis Police Department for the motorcycle squad.

J. M. GROSSMITH, J. cashier of the Excelsior Motor Manufacturing & Supply Co., was stricken suddenly with appendicitis while at his duties recently, and an operation was necessary. He has now almost entirely recovered. Mr. Grossmith is one of the few identified with the new Excelsior Company who were also connected with the old firm.



ANOTHER TRACK RECORD

Hung Up by Otto Frykman on Hamline Course in Minneapolis Last Week.

MINNEAPOLIS, Minn.—Daring riding by Ray Porter and Otto Frykman featured the races held July 6 on the Hamline race track in this city under the auspices of the Minneapolis Motorcycle Club. One track record was lowered when Otto Frykman, on an Indian, covered a mile in 55½ seconds, breaking the record formerly held by Harvey Barnard, of Milwaukee, made two years ago on a Harley-Davidson, of 56 flat. Unfavorable weather conditions had put the track in bad condition.

Frykman and Porter, on Indians, furnished the most excitement of the afternoon in the fifteen-mile contest, in which seven riders competed. Frykman jumped to the front at the start and held that position till the sixth lap, when Porter caught up with him and the two fought it out for first place for the next three laps, Porter finally sprinting away in the tenth lap. He was never headed after that. His time for the fifteen miles was 14:33½.

In the one-mile time trial, on his first time around, Ray Porter nearly equaled the track record of 56. He was followed by Frykman, who first made the distance in 57¾ seconds and then succeeded in hanging up a new record on his second trial by covering the ground in 55½ seconds. Summaries:

Three-mile race for novices.—First, Irwin Embickson, Harley-Davidson; second, Frank Low, Harley-Davidson; third, Jerry Miller, Excelsior; time, 3:47½.

Five-mile race, 54 cu. in. limit; stripped stock machines.—First, Ray Porter, 4 Indian; second, Ed Hammer, 7 Indian; third, C. C. Gould, Thor; time, 5:46½.

Five-mile, free-for-all.—First, Otto Frykman, Indian; second, Ray Porter, Indian; third, Ed Hammer, Indian; time, 5:01½.

Five miles for private owners, 30.50 cu. in. limit.—First, Frank Low, Harley-Davidson; second, Charles Boyer, Wagner; third, Carl Peavey, Thiem; time, 6:10½.

One-mile time trials for track record.—Otto Frykman, Indian, :55½; Ray Porter, Indian, :56¾; Joseph Shimak, Indian, :56¾; Tom Miller, :56¾.

Five-mile free-for-all, 30.50 cu. in. limit.—First, Ed Hammer, Indian; second, C. C. Gould, Thor; third, Irwin Embickson, Harley-Davidson; time, 5:45.

Three-mile free-for-all.—First, Ray Porter, Indian; second, Otto Frykman, Indian; third, Tom Milton, Indian; time, 2:59½.

Ten-mile race for private owners.—First, Tom Milton, Indian; second, Louis Gerber, Indian; third, Fred Lussier, Excelsior; time, 10:14½.

Fifteen-mile free-for-all.—First Ray Porter, Indian; second, Otto Frykman, 7 Indian; third, Ed Hammer, 7 Indian; time, 14:35½.

Three-mile race, 61 cu. in. limit, stripped stock machines.—First, Ray Porter, 7 Indian; second, Tom Milton, 7 Indian; third, Joseph Shimak, 7 Indian; time, 3:03.

Referee, William Edwards. Judges, N. A. Frykman, P. G. Nichoff, S. Berkmyer. Timers, A. J. Ludwig, G. H. Riebeth, J. W. Trumble. Starter, Tom Bird.

RICHMOND RACES.

FOLLOWING are the results of the race meet held by the Old Dominion Motorcycle Club, Richmond, Va., July 4:

Three-mile novice, 30.50 class.—First, Fletcher, 4:32; second, D. Catonni, 4:35; third, Sapere, 4:36.

Five-mile club championship, 30.50 class.—Won by Fletcher, 7:15.

Five-mile club championship, 61.00 class.—Won by Bivins, 6:20.

Five miles, 30.50 class, open.—First, Philnots, 7:01; second, Bivins, 7:15; third, Fletcher, 7:17.

Five miles, 61.00 class, open.—First, Hines, 6:04; second, Bivins, 6:05; third, Suttle, 6:07.

Ten-mile handicap, open.—First, Bivins, 12:49; second, Hines, 13:39; third, Lenz, 13:50.

Match race, in three heats, between Hines and Lenz.—First two heats won by Hines. Time, 3:14 and 3:18, respectively.

The mile track was very heavy on the curves, which was a serious handicap. The sensational riding of Bivins and Hines was the features of the day. Fletcher, a novice, also lead in his class.

FATAL CRASH AT CLEVELAND.

CLEVELAND, June 30.—Racing tonight was brought to a sad end when Bob Hunter, of Newark, N. J., a professional rider, was instantly killed in a collision with Finn Huttering. The accident occurred in the second heat of the three-cornered two-mile professional match between Huttering, Hunter and Buzz Knapp. They were on the third lap and well bunched, Huttering leading, Knapp second and Hunter third. Knapp overtook Huttering and passed him and Huttering rubbed Knapp's rear wheel, throwing Huttering up the track directly in front of Hunter. Hunter saw Huttering fall and was seen to shoot up the track like a bullet; thousands of spectators sprang to their feet in horror as Hunter smashed into a lamppost at the top of the saucer. Huttering had spun around on the track with his machine and then jumped, after first doubling himself up in a knot, and his machine collided with Hunter and his machine for the second time. The machines rolled down the steep incline upon the ill-fated Hunter and difficulty was experienced in shutting the racing motors off. All that saved Huttering from death was the fact that when thrown from his machine he doubled up with hands over his head and turned somersault after somersault down the incline. Summaries:

Three miles, amateurs, for 7 h. stock machines.—Roehl (Indian), Henikman (Indian), Norton (Indian); time, 2:54.

First heat, three-mile three-cornered match race.—Knapp (Indian), Huttering (Indian), Hunter (Indian); time, 1:29½. Second heat stopped at second mile account of accident.

Four-mile invitation professional.—Gibson (Indian), Seliga (Indian), Carslake (Indian); time, 2:57½.

Time trials for two-mile track record.—Smiley breaks record; time, 1:25½; Gibson, 1:28; Standen, 1:30; Seliga was flagged account of break in track.

Five-mile free-for-all professional.—Gibson (Indian), Knapp (Indian), Smiley (Indian); time, 3:45½.

GIBSON A WINNER.

CLEVELAND, June 29.—Wylie Gibson, of Lorain, Ohio, came into his own last night at the motordrome and won both races in which he was entered, the three and five-mile events. Frank Seliga was the only man who could keep up with Gibson and he was away in the rear at the tape. Carslake was entered in the five-mile event and had a hard time to keep from being lapped. His machine did not seem to be rolling. Summaries:

Three miles, amateurs, 7 h. stock machines.—Roehl (Indian), Henikman (Indian); time, 2:55½.

First heat of two-mile match race for best two out of three heats.—Carslake (Indian), Smiley (Indian); time, 1:32. Second heat, Smiley (Indian), Carslake (Indian); time, 1:31. Final, Carslake (Indian), Smiley (Indian); time 1:29.

Three-mile invitation, professional.—Gibson (Indian), first; Seliga (Indian); Standen (Indian); time, 2:14½.

First heat five-mile free-for-all, professional.—Gibson (Indian), Carslake (Indian), Standen (Indian); time, 1:29. Second heat, Seliga (Indian), Knapp (Indian), Hunter (Indian); time, 1:29½. Final, Gibson (Indian), Seliga (Indian), Knapp (Indian); time, 3:48½.

RIVERVIEW RACES.

CHICAGO, July 5.—In the absence of Ray Seymour and Morton Graves, Joe Wolters and Chas. Balke had things their own way in the July 4 races at Riverview. Summaries:

Nine-mile professional match race between Joe Wolters and Balke, three-mile heats.—First heat won by Wolters in 2:10; Balke won second heat in 2:11½ and third heat in 2:11½.

Nine-mile invitation professional race, three-mile heats.—Dave Kevnie, first; Wm. Samuelson, second; time, 2:15. Second heat, Theodore Samuelson, first; Wm. Samuelson, second; time, 2:17½. Final heat, Wm. Samuelson, first; Theodore Samuelson, second; Court Edwards, third; time, 2:16½.

Four miles, for amateurs.—Peter Wenk, first; Ed Bethke, second; J. T. Traftsky, third; time, 4:14.

Ravenswood Sweepstakes, free-for-all, six miles.—Joe Wolters, first; Balke, second; Wm. Samuelson, third; time, 4:22½.

BIG LANTERN PARADE

Motorcyclists, Automobilists and Bicyclists Will Figure in New York Program on July 24.

WHAT promises to be the largest and most novel affair of its kind ever held will take place in New York and Brooklyn on Wednesday evening, July 24, in the form of a monster lantern parade of motorcycles, bicycles and automobiles, under the auspices of the United Cyclists. There will be music, red fire and fireworks and from the interest already shown with the announcement but a few days old, enthusiasm aplenty will not be missing. All riders and clubs are invited to join in the parade and requested to decorate their machines with the national colors and lanterns.

Participants in the parade have been invited by Manager Wellman to witness the motorcycle races at the new Brighton Beach Motordrome, and the parade will finish at the track. A special card of events is being arranged in which all the speed stars will appear, including the United Cyclists Sweepstakes and the Brooklyn Invincible Handicap.

Several boxes have been reserved and Mayor Gaynor, Borough President Steers and other city officials have been invited to review the parade and witness the races as the guests of President J. A. Hall, of the United Cyclists.

New York riders are requested to assemble at 7 o'clock sharp at Columbus Circle. The main parade will form as follows in Brooklyn, where it will be joined by the New York division:

Grand marshal, band, motorcycle police and motorcycle division on Heyward street, east of Bedford avenue.

Automobile division—Rutledge street, east of Bedford avenue.

Bicycle division—Penn street, east of Bedford avenue.

Route of parade—Bedford avenue to Parkside, to Ocean avenue, to Sheepshead Bay, to Brighton Motordrome.

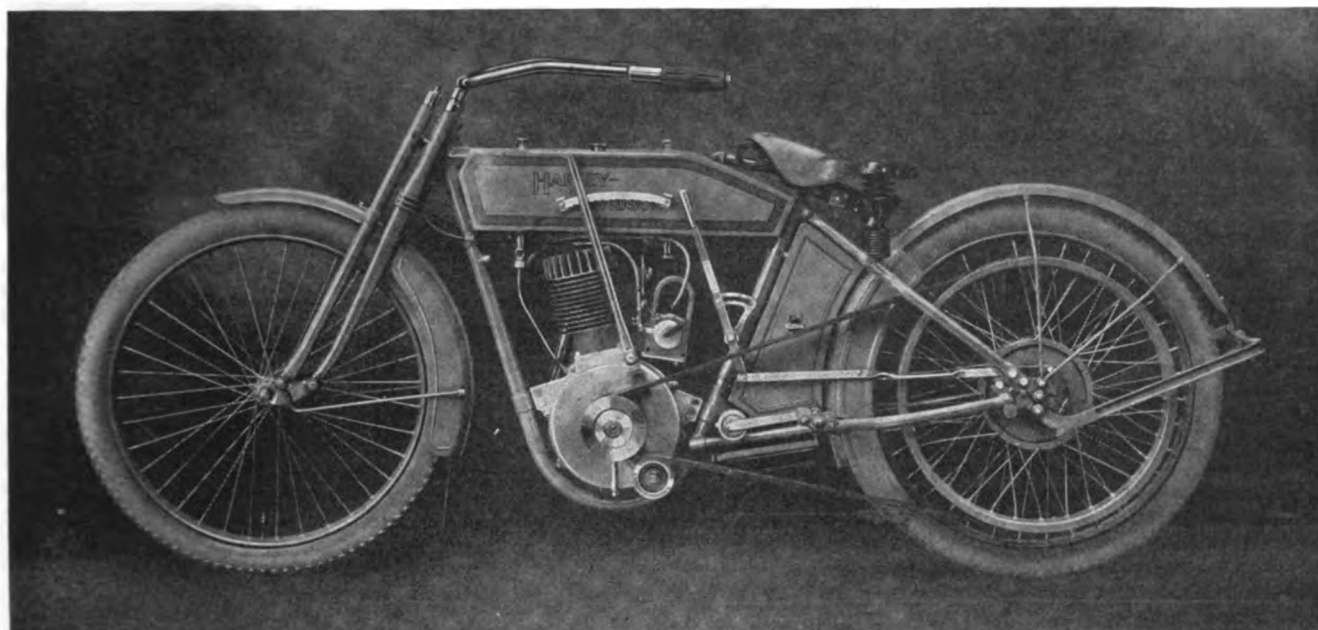
The officials, so far selected, are Grand marshal, J. A. Hall; assistant grand marshal, A. H. Patterson; marshals, O. P. Warlick, V. J. Lind, Julius Bindrim, Sylvain Segal, Jerome Shaw and Jerome Mann.

Clubs or individuals desiring place in line or further information are requested to communicate at once with the United Cyclists' Parade Committee, 1080 Bedford avenue, Brooklyn, N. Y.

CHICAGO M. C. PICNIC.

CHICAGO.—Last Sunday was picnic day for the Chicago M. C., an outing being held for the members and friends at Sharpshooters' Park, a little over a mile from Hammond, Ind. Nearly six hundred riders were in attendance, including many tandemites. Competitions of every description were held, and the list of prizes was long.

All the events were scored on the point system, a first counting five, a second, three, and a third, one. Each contestant, therefore, was almost compelled to enter any event, and the one scoring the largest number of points was given first choice of the prizes. Wm. Murray won first choice with sixteen points, and picked a diamond ring donated by Marcus Gelder, a live member of the club. Rex Wickwire took a speedometer donated by the Edwards-Christ Company as second prize, and Wm. Covington picked a silk mohair riding suit for third; it was donated by The Hub.



AT Florence, Texas, June 28th and 29th, Gordon Purl riding his stock single cylinder Harley-Davidson (nearly two years old) won first place against all comers, including, among others, a port holed factory racing machine of another make.

His machine had been ridden 15,000 miles on a rural mail route previous to the race.

The day after the race the owner left on a pleasure trip through Mexico *on the same machine*, which trip would hardly have been undertaken if he had not been confident that his Harley-Davidson could still render satisfactory service.

Continued service is what you get in a Harley-Davidson and what you cannot obtain in any machine at a lower price.

Harley-Davidson Motor Company

242 C Street

Milwaukee, Wisconsin

SCENIC FEATURES OF COLUMBUS

IN addition to a squad of high-pressure enthusiasts the city of Columbus, toward which the eyes of motorcyclists throughout the country are now being turned, has many natural advantages as a convention scene, and not a few points of scenic beauty calculated to impress the visitor. The committee in charge of arrangements for the F. A. M. convention is keeping in mind all these natural conditions and making the most of them. As was shown in the detailed program of entertainment, which was printed in a recent issue, one of the big features of the entertainment is to be a barbecue at Olentangy Park, one of the real beauty spots of Columbus. This park, which is named from the Olentangy River, which runs through it, is one of the best natural parks in the State of Ohio. Situated on either bank of the Olentangy, it is sufficiently rolling and hilly to present most charming scenery. Nature has been lavish in framing this piece of woodland, but what nature has omitted the hand of man has accomplished, and landscape gardeners have made a portion of the park into a bower of flowers.

Olentangy Park.

Olentangy Park contains many pleasant retreats for motorcyclists, and in addition there are the usual forms of amusements found in parks of that nature. Manager J. W. Dusenbury has spared no pains to put the amusement plant in excellent shape for the F. A. M. barbecue and vaudeville entertainment. The park is reached over North High street, which is one of the best paved streets in the city. The street passes along the fine campus of the Ohio State University, which is another of the beauty spots of the Buckeye capital. The campus contains hundreds of acres laid out in excellent drives and boulevards, and there are no restrictions as to the use of the drives and boulevards by motorcyclists. On the campus are many fine buildings which are charming from an architectural standpoint.

Another park of great natural beauty, called Indianola, is located just outside of the city limits in the northeastern section. This park, like Olentangy, is situated on rolling ground. One of the features of entertainment at this park is the large swimming pool, located near the entrance. This pool is made of cement and is fed by natural springs which abound in that vicinity. The temperature of the water is controlled by the flow of different springs, and during the summer months thousands of people take advantage of the pool to have a cool plunge. Indianola Park is one of the charming spots of Columbus and will be a favorite place for motorcyclists to spend a few hours after a long, hot ride in the country.

But these two parks are not the only places

where a few hours can be spent in quiet and comfort. The city has a goodly number of public parks which are kept in excellent condition and which are open to the motorcyclists who will visit the Buckeye capital. Among these are: Goodale Park, Franklin Park, Schiller Park, Livingston Park and Heimandale Grove. Goodale Park is located nearest to the center of the city and is only half a mile from Broad and High streets. It is one of the best-kept parks, and is an ideal recreation spot, even in the torrid summer months. It is reached from Goodale street, which branches off High street within one block of the main entrance.

Fine Boulevards.

Schiller Park, formerly called City Park, is located in the southern end of the city and is two squares off High street, which is the principal thoroughfare of the Buckeye capital. Here is a statue of Schiller, the patron of that portion of the city which was settled exclusively by emigrants from Germany about a century ago. Schiller Park is one of the oldest of the city's parks and is well kept. It covers hundreds of acres. Excellent drives and boulevards penetrate the various parts.

One of the finest parks in the city is located in the extreme eastern part and is called Franklin Park. This was formerly the old Ohio State fair grounds and contains what is now styled a circle, formerly a race track. The park contains close to 1,000 acres, and is plentifully supplied with trees. Fine drives penetrate it in many directions, and the approaches are over excellent paved streets. The principal approach is over East Broad street, which is one of the thoroughfares often used by motorcyclists and automobilists. At Franklin Park most of the tours run by the Columbus Motorcycle Club are started, as it is an excellent place to congregate.

Livingston Park is located in the southeastern part of the city and is one of the newer breathing spots. It is a natural woodland and is beautifully laid out. It is located quite close to the Columbus Driving Park, which is credited with having the best dirt track in the United States. Heimandale Grove is a piece of woodland located outside of the city limits on the Groveport Pike, southeast of the city. This is a favorite picnic ground and is a point where motorcyclists can go for a day's pleasure.

United States Barracks.

Another point of interest is the United States Barracks, located on Cleveland avenue in the northeastern part of the city. The grounds are spacious and are provided with macadamized drives and boulevards. There are no restrictions against motorcyclists using the grounds for pleasure purposes.

Columbus contains many beautiful streets, which are one of the attractive features of the Buckeye capital. The city is shaped like a Maltese cross, being longer from east to west and north to south than in other directions. High street, which runs north and south, is the principal business street of the city. Beyond the few business blocks in the downtown district this street is paved with asphalt and is very frequently used by motorcyclists. The principal thoroughfare running east and west is Broad street, which is paved with asphalt east of High street for a distance of about five miles. Broad street is the principal residence thoroughfare of the city, and both sides are lined with beautiful mansions for a distance of several miles.

The city government has just completed the installation of a new lighting system, which will be in operation during the meeting of the F. A. M. It is an up-to-date cluster system and covers all of the central portion of the city. While the distinctive feature of the old system was that of the arches, the lighting under that plan was inadequate.

One of the places where activity will not be lacking during the F. A. M. meet is the home of the Columbus Motorcycle Club, which is located on East Eighth avenue. The clubhouse has been improved and the grounds have been placed in excellent shape for the coming of the horde of riders. The enthusiasm of the club members knows no bounds, and everything will be done to make the stay of the visitors break all sociability records.

ST. LOUIS CLUB BOOMING.

WITH a new set of officers in charge the St. Louis (Mo.) Motorcycle Club is keeping on the move these days, and interest in the organization is booming. From 35 to 40 members go out on the Sunday runs which are held regularly, and the meetings are also well attended. Not long ago the club cleared up all its outstanding bills and still had a tidy sum in the treasury. The club has made arrangements to have a strong delegation at the Columbus convention.

CHANGES OF ADDRESS.

SUBSCRIBERS to MOTORCYCLE ILLUSTRATED who contemplate changing their addresses are requested to send us notice to that effect at least two weeks in advance. Although the post offices notify this paper in such cases, its notices are usually received some time after the change of address has been made. As a result subscribers who depend entirely upon postal notices to this paper, often miss one or even two issues of the paper, or at least have such issues delayed in transmission.

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We have drawn up a list of recommendations, showing the correct grade of Gargoyle Mobiloil for these various machines.

The complete list is shown on the right.

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They are handled by the higher class garages, automobile supply stores and others who supply lubricants.

This list shows the right oil for your motorcycle.

Explanation: In this schedule the letter opposite the name of motorcycle indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." Recommendations cover all types of the same make unless otherwise stated.

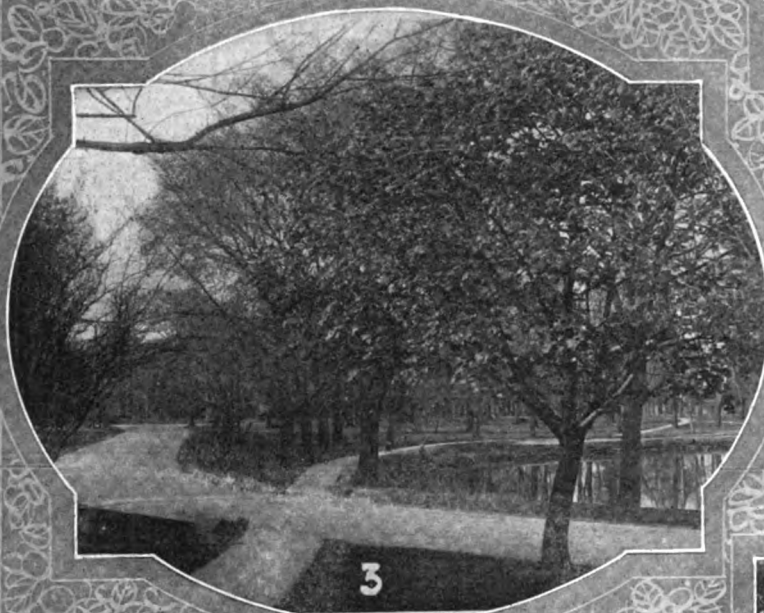
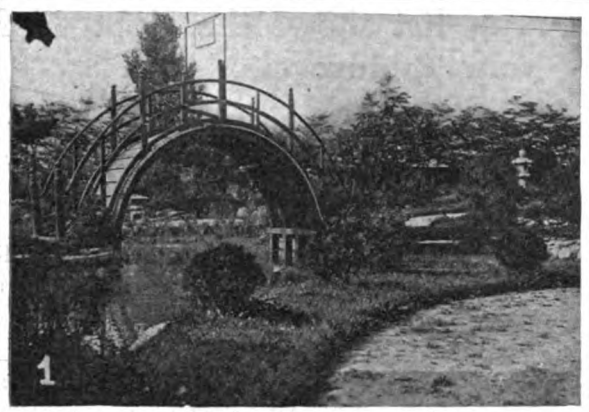
MODEL OF MOTORCYCLE	1908		1909		1910		1911		1912	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
American.....	B	B	B	B	B	A	B	A	B	A
Apache.....	B	A	B	A					B	A
Armstrong.....	B		B						B	A
Arrow.....									B	A
Augustin-Koch.....									B	A
Aurora.....	B	A	B	A					B	A
Auto-Bi.....									B	A
Black Hawk.....									B	A
Bradley.....									B	A
Breed.....	B	B	B	B					B	A
Crouch.....	B	A	B	A	B	A	B	A	B	A
Curtiss.....	B		B		B		B		B	
C. V. S.....					B		B		B	
De Luxe (1 cyl).....							B		B	
De Luxe (2 cyl).....							B		B	
Detroit.....							B		B	
Detroit Bi-Car.....					B	B	B	B	B	B
Eagle.....									B	
Electra.....			B	B	B	B	B	B	B	B
Emblem (1 cyl).....					B	A	B	A	B	A
Emblem (2 cyl).....									B	
Erie.....	B	B	B	B	B	A	B	A	B	A
Excelsior (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Flanders.....									B	
F. N.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Geer.....	B		B		B		B		B	
Gerhart.....					B	A	B	A	B	A
Greyhound.....					B	A	B	A	B	A
Harley-Davidson.....	B	A	B	A	B	A	B	A	B	A
Haverford.....							B		B	
Hilaman.....	B	A	B	A					B	A
Henderson.....									A	Arc.
Indian (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Indian (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Iver Johnson.....									B	
Kokomo.....									B	
Majestic.....									B	
Manson.....	B	B							B	
Marvel.....					B	B	B	B	B	B
Mayo (1 cyl).....	B	B								
Mayo (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Merkel.....	B	A	B	A	B	A	B	A	B	A
Minerva.....	B	A	B	A	B	A	B	A	B	A
Minneapolis.....	B	A	B	A	B	A	B	A	B	A
M. M.....									B	
Monarch.....									B	
Motorette.....			B	A	B	A	B	A	B	A
New Era.....									B	
N. S. U. (1 cyl).....	B	B	B	B	B	B	B	B	B	B
N. S. U. (2 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless.....									B	
P. E. M.....	B	A	B	A	B	A	B	A	B	A
Peugeot.....			B	A	B	A	B	A	B	A
Pierce (1 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pierce (4 cyl).....									B	
Pope.....									B	
Racyle.....									B	
Reading Standard.....	B	A	B	A	B	A	B	A	B	A
Reliance.....	B	B	B	B	B	B	B	B	B	B
Royal.....	B	B	B	B	B	B	B	B	B	B
Schickel.....							B	A	B	A
Scott.....	B	A	B	A	B	A	B	A	B	A
Thim.....	B	A	B	A	B	A	B	A	B	A
Thor (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Thor (2 cyl).....	B	B	B	B	B	B	B	B	B	B
Torpedo.....	B	A	B	A	B	A	B	A	B	A
Triumph.....	B	A	B	A	B	A	B	A	B	A
Wagner.....	B	B	B	B	B	B	B	B	B	B
Yale (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Yale (2 cyl).....					B	A	B	A	B	A

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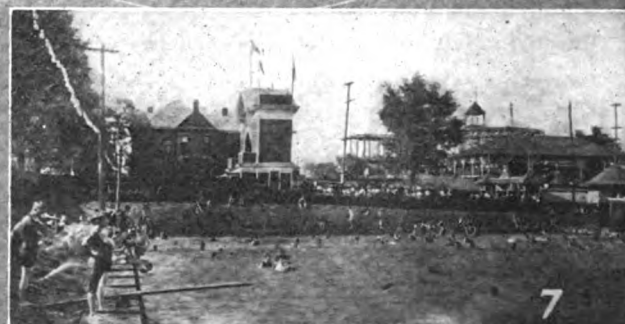
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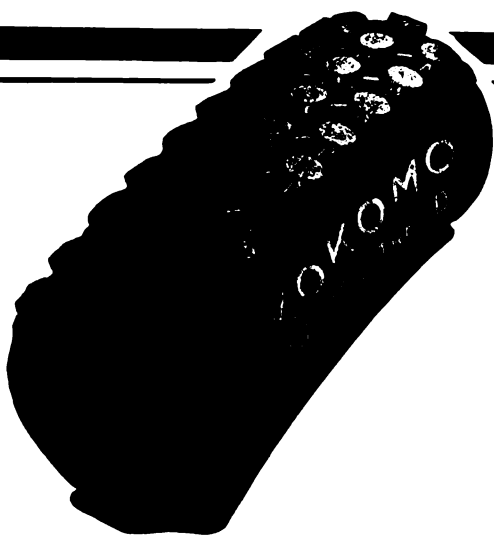
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IN COLUMBUS

1. Japanese Bridge in Olantangy Park
2. Campus of the Ohio State University
3. Franklin Park
4. Lake in Goodale Park
5. Part of Schiller Park
6. Another View of Olan-tangy Park
7. Swimming pool in Indianola Park.





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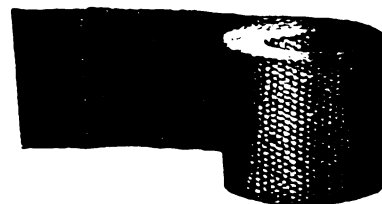
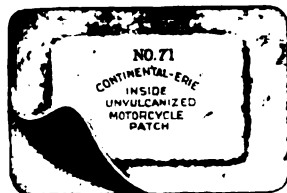
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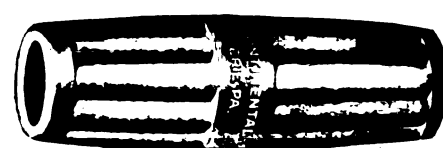
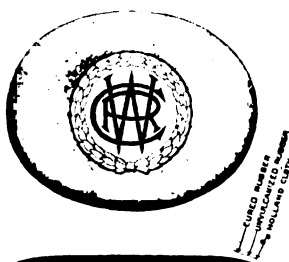
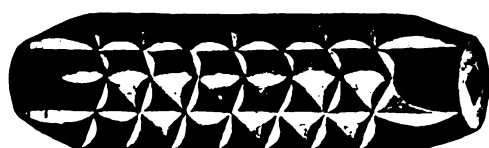
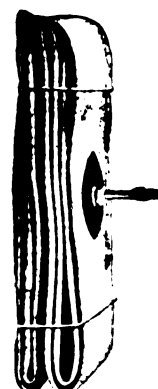
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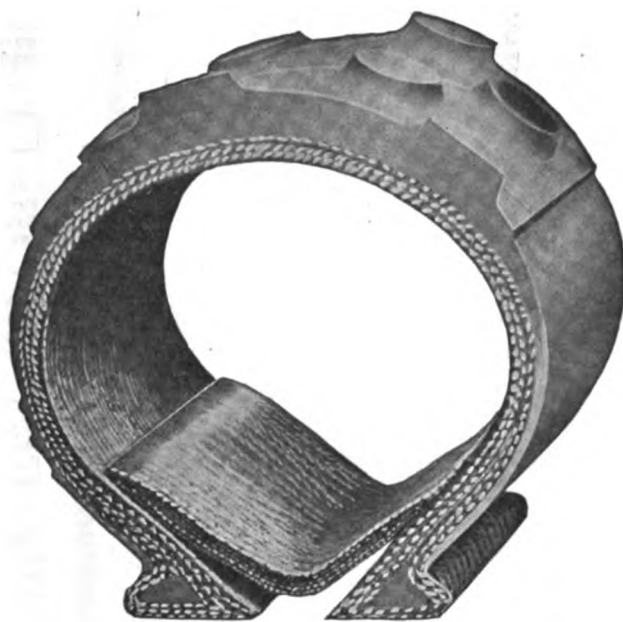
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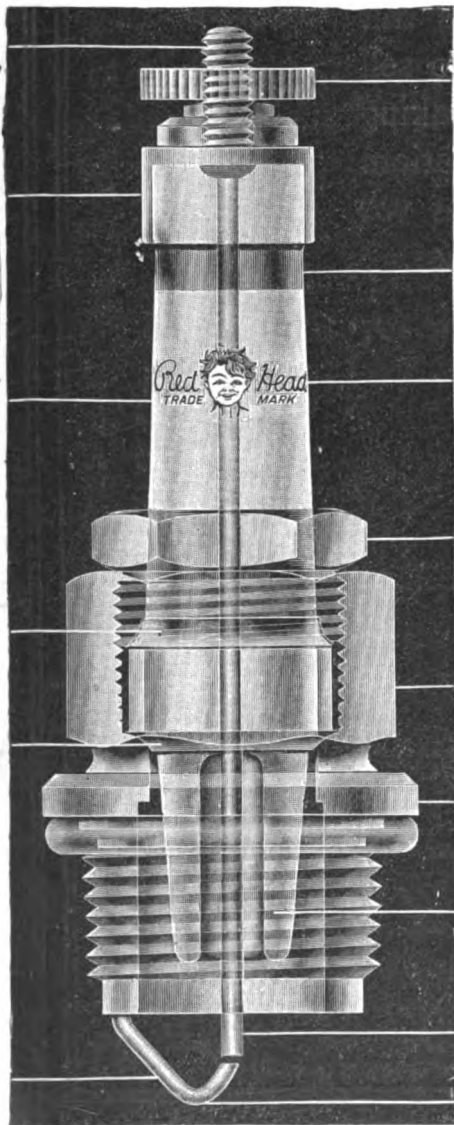
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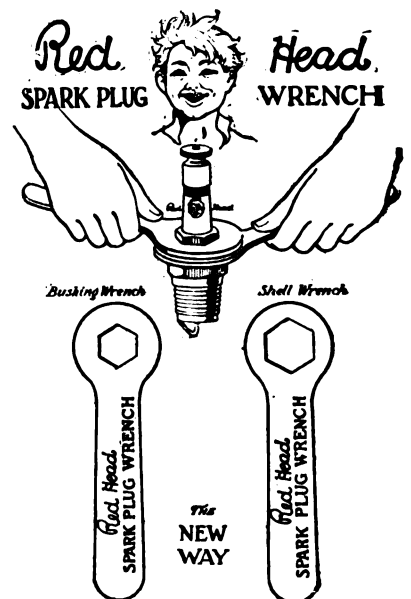
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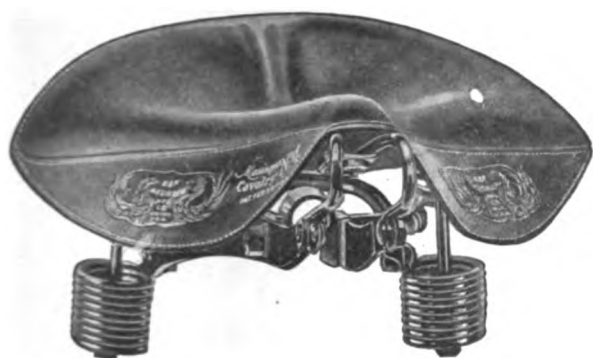
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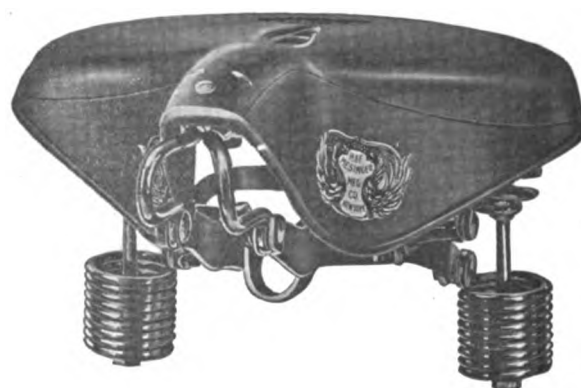
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MESINGER CAVALRY No. 4, with open front, for lowest saddle position. The ideal seat for man or woman.



STANDARD No. 4, showing open front for lowest position.

Comfort—Ease—Durability—that's what the Mesinger Saddle offers You

To you who contemplate extended trips this summer, we offer the Mesinger Cavalry Saddle as the maximum of comfort, ease and durability. There is no other saddle on the market to-day into which has entered such high-class material, such skilled workmanship, such scientific construction. All Mesinger Saddles are absolutely proof against any and all conditions which tend to destroy the efficiency of the ordinary saddle.

WHY? Because

- 1st—All frame parts are made of highly carbonized steel—no castings whatever are used in Mesinger Saddles.
- 2nd—All tops on Mesinger Saddles are made of the finest leather obtainable, and are stretched **before** shaping—not afterwards. All Mesinger Saddles are hand-padded with curled hair.
- 3rd—Our patent shock absorber not only positively absorbs all shocks, but also adds materially to the life of the springs.

Ask your dealer for a demonstration—or—

"ASK THE RIDER AND WATCH HIM RIDING."

Important—All tops and frame parts are guaranteed for one year.

H. & F. Mesinger Mfg. Co.

1801-1807 First Ave., N. Y.

MESINGER

POLICE CAPTAINS DON'T GUESS!



Capt. A. J. Stiles and ten members of the Chicago West Park Police motorcycle squad.

THEY KNOW THEIR SPEED AND YOURS

Police Departments make it their business to buy speed-indicators that are absolutely accurate, instruments capable of offering real evidence in Court. We reproduce an unsolicited letter from Capt. Stiles, of the Chicago Police. Read what he has to say about the JONES Speedometer. This is additional and undeniable evidence regarding our claim that the JONES is the most accurate speedometer obtainable.

WEST CHICAGO PARK COMMISSIONERS

Department of Police.

A. J. Stiles, Captain.

Chicago, June 21, 1912.

Jones Speedometer, Chicago, Ill.

Gentlemen: It is with great satisfaction that I have at last found a Speedometer that has proven under all kinds of tests to be almost absolutely perfect. I have tried all other Speedometers and was compelled to discard them as they would not stand a test for accuracy; or, in other words, were merely a guess. In using the Jones Speedometers in my Department, I can conscientiously say that we have found no condition, and under no circumstances the Jones Speedometer to be wrong.

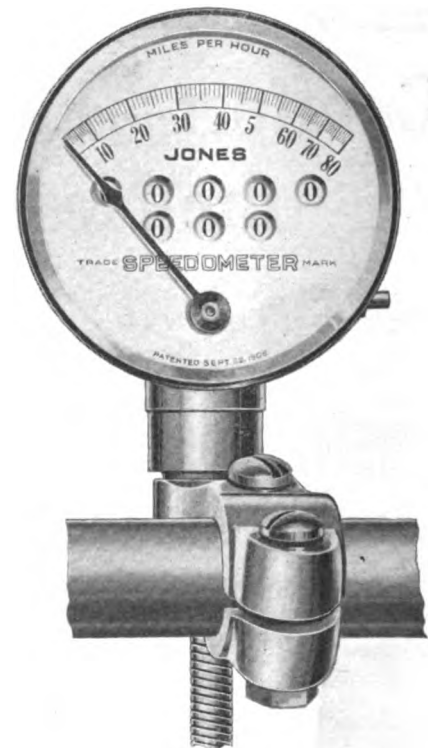
Inasmuch as we are making a great many arrests for the violation of the State Vehicle Law, and with a disposition to be fair, I say again that it was a great consolation that we have found a Speedometer that we can depend upon. These Speedometers I test every day under a Stop-watch, and with a very few exceptions they are always accurate.

Yours very truly,

ARTHUR J. STILES, Captain.

West Park, Police Dept.

THE JONES



Model 31—3" 60 mile.

" 831—3" 80 "

Price \$20.00

The JONES is used by the police in all the larger cities of America and Europe. It is selected above ordinary speedometers because of its unerring accuracy—because it is the best instrument. Constructed on the principle of CENTRIFUGAL FORCE, impervious to temperature changes, and identical in construction with the famous JONES Speedometer used by motorists. Get a JONES for your machine. Quickly and easily attached. Ask your dealer. Do not accept an inaccurate substitute.

The Jones Speedometer

CHICAGO: 1430 Michigan Avenue.
BOSTON: 109 Massachusetts Avenue.
PHILADELPHIA: 1416 Vine Street.

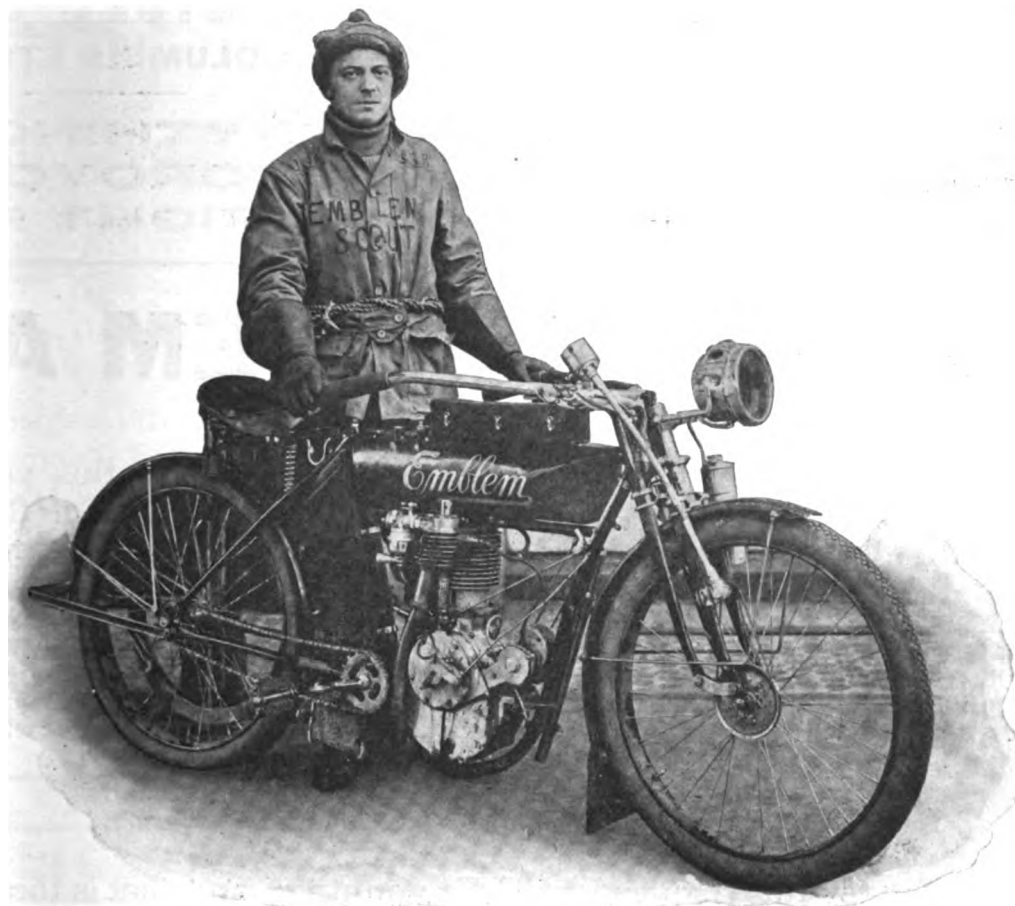
SAN FRANCISCO: 544 Van Ness Avenue.
BUFFALO: 825 Main Street.
LOS ANGELES: 1229 S. Olive Street.

Factory: New Rochelle, N. Y.

PORTLAND: 329 Ankeny Avenue.
SEATTLE: 917 East Pike Street.
DETROIT: 41 Washington Boulevard.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

8,000 Miles on Empires



FRANK LIBBEY VALIANT
Manufacturer and Distributor of
SPECIALTIES

Angola, N. Y., Feb. 1, 1912.

EMPIRE TIRE CO.

Buffalo, N. Y.

Gentlemen:—I want to tell you the excellent service I have secured from Empire Checkered Tread Tires. When I started my test for the War Department last February I looked around for the tire best suited to stand the severe use to which it was to be put and chose the Empire. I never regretted it. I traveled a little over 8,000 miles without a puncture and nearly 14,000 miles before the tires were accidentally destroyed in a fire. They then appeared good for another season. "Service" and "Empire Tires" are synonymous. The wise rider chooses his mount—the ultra-wise insists on having it equipped with Empire Tires.

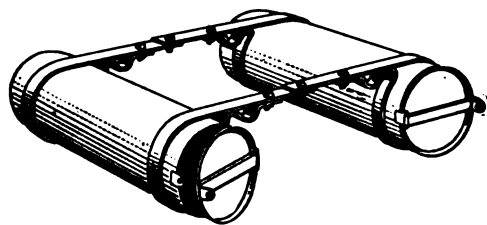
Yours very truly,

FRANK LIBBEY VALIANT.

DOESN'T THIS CONVINCING YOU?

Empire Tire Co. **FACTORIES**
TRENTON, N. J.

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Patterson's Tool-roll Carrier

Compact, Convenient,
Indestructible.
Straddles the lug-
gage carrier.
Especially adaptable
to Indians.

A tool-roll made of any cloth with departments sewn in for each tool, besides keeping each particular tool where it can always be easily found prevents tool-rubbing and the usual noisy rattle of loose tools.

When finished using the tools, simply roll up the tool-roll and insert in one of the tubes of the carrier. The second tube can be used for other purposes.

Price, \$6.00

A. H. PATTERSON, 1080 Bedford Ave., Brooklyn, N. Y.

UTICA, N. Y.

When touring, stop at

UTICA CYCLE COMPANY

COLUMBIA STREET

**EVERYTHING FOR
MOTORCYCLISTS
AT RIGHT PRICES**

P.E.M. LEADS THEM ALL!

In every race meet in which the P.E.M. has been entered this year, its first season, this wonderful motorcycle has captured the big end of the first and second places. Just read this record—Deeds talk louder than claims.

JANESVILLE, WISC. — Big Decoration Day Meet. Six events; The P.E.M. took four firsts. In event 5, A P.E.M. "single" won by over 13 seconds a 10-mile race against a field of "twins."

MILWAUKEE, WISC., June 8th—The P.E.M. took first in novice, first in Private Owner and Second for Stock Machines (in this latter event the winner was a stripped machine with a trade rider).

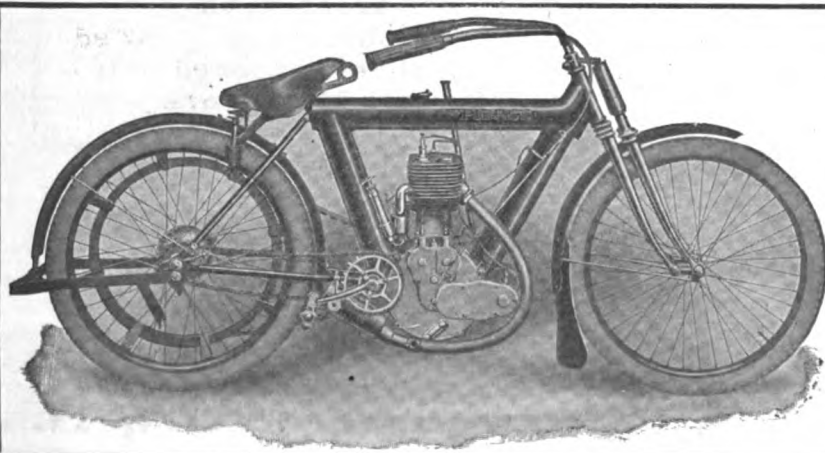
OSHKOSH, WISC., June 9th—In Six events on a half mile track P.E.M. won five firsts and two seconds.

There is a reason for this regular consistent winning—and that is the superiority of the P.E.M.—Easy riding on bad tracks because of the "leaf-spring" hung frame.

High powered Engine because of high compression due to overhead valve mechanism. Positive chain drive with free engine clutch.

If you want to be a winner on the track or on the road—you must ride a P.E.M. Write today for booklet and special rider agency offer.

WAVERLEY MFG. CO., Waverley Place, JEFFERSON, WIS.



PIERCE SINGLE CYLINDER Wins Another Victory

Following letter received from F. A. Baker & Co., New York agents for Pierce motorcycles.

June 24, 1912.

The Pierce Cycle Co., Buffalo, N. Y.

Gentlemen:

"We wish to advise you that one of our riders yesterday went through the 200-mile Endurance Run of the North Jersey Motorcycle Club.

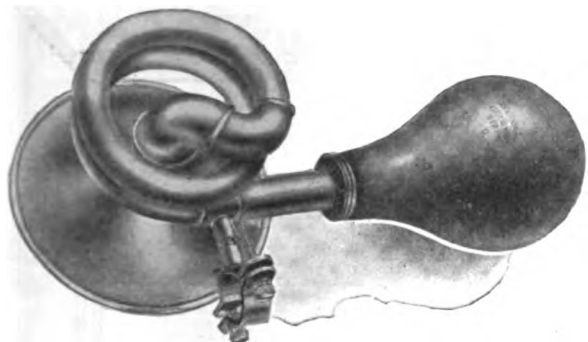
The rider says: 'I made them all sit up and take notice, for my Single would pass even the 7 h. p. twins.' He completed the entire distance without a single mechanical adjustment."

Ask for catalog and agency proposition. Immediate Deliveries.

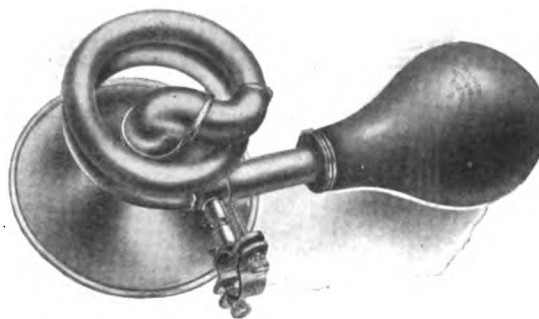
The Pierce Cycle Company, Buffalo, N. Y.

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MOTORCYCLE HORNS

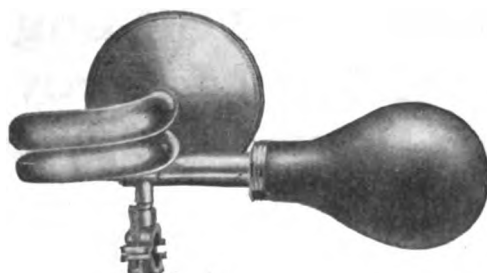


No. 24—5 inch bell



No. 21—4 1-2 inch bell

Made by the largest manufacturer of automobile horns in America, a factory that has produced more horns than all the other factories combined, for the last 7 years.



No. 19—3 1-2 inch bell

You can get "quality,"
"prompt delivery" and
"lowest prices."

Send for catalogue and quotations.

AUTOMOBILE SUPPLY MFG. CO.

220 Taaffe Place, Brooklyn, N. Y.



Gasoline Gauges For All Motorcycles

\$1.50 postpaid. Give depth of tank.

Circulars on request.

WEISS MFG. CO.

Torrington, Conn.

**Bicycles and Bicycle Sundries
Motorcycle Sundries and Supplies**

THE SIDNEY B. ROBY CO., Rochester, N. Y.

**TEN THOUSAND RIDERS READ
THE MART**

**Our Classified Advertising Page
THREE CENTS A WORD**

**See Pages 20 and 21
for a
Bunch of Beauties**

The other day we figured up that more than 80% of the motorcycles built in this country are fitted with our Valve Stems.

For those who are not already using our product, this should be pretty good evidence that our valves are made right.

**The Electric Welding
Products Co.**

CLEVELAND, OHIO



Get our 160-page Catalog of Motorcycle and Bicycle Supplies

In it you will find illustrated and described, only articles of proven superiority. We carry the most complete line of bicycle and motorcycle supplies in the United States.

Our enormous floor space, our huge purchasing facilities—coupled with years of experience in the marketing of these goods, enables us to guarantee *prompt deliveries* and *absolute satisfaction at all times*.

We are Western Distributors for Tucker Wood Rims. Most perfect made and finest finished.

No goods sold at retail.

Chicago Cycle Supply Co.

22a W. Lake St.

Chicago, Ill.

Do Justice to Your Motorcycle

Equip it with the "Simplex" Spring Tandem Attachment

Safe, simple, durable.

Indestructible, because made of highly tempered steel.

Most efficient, because of its two shock absorbers.

Pleasing to the eye; finished in enamel and nickel.

Low saddle position; light and flexible.

Eliminates all discomfort; adjustable to weight of rider.

Xactly what you need; you won't feel lonely any more.

The extraordinary compactness of the "Simplex Spring Tandem Attachment," together with its two shock absorbers, weight adjustments, etc., make it the ideal attachment for comfortable and safe riding.

Price, including Saddle, \$15.

Angsten-Koch Co.

360 W. Garfield Blvd.
Chicago, Ill.



PATENTED
Simplex Spring Tandem Attachment

What Enthusiastic Riders Say About the Monarch BIG 5

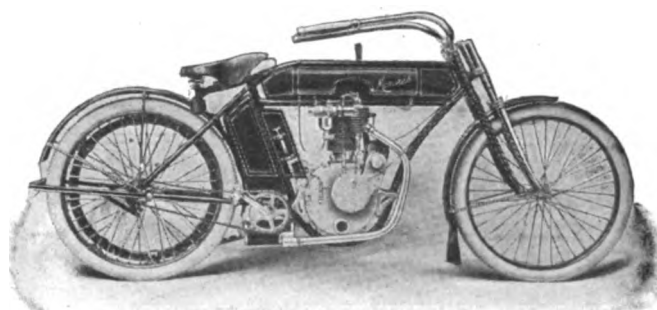
44 Baltimore St., Hanover, Pa.

"I received the Monarch Big 5 on the 20th inst., in first-class condition. Have just tested it out on the biggest hill in this vicinity and it climbed a hill here, with the throttle only half open, that few of the singles have ever been able to make.

"In your letter of the 6th inst., you stated that you would give me the agency for this vicinity after I had taken the machine, tried it out, and saw for myself what it would do. Put me down quick for this vicinity.

"This machine more than exceeds my expectations. I will cover this territory thoroughly and if you receive any inquiries from this vicinity, send them to me. I can see now why you are willing to send the Monarch out and let a fellow see what it will do before he takes the agency. You know that your machine will do more than you claim for it. Your proposition is backed by facts."

(Signed) C. J. FREY.



Esbon, Kans.

"My machine came in last Saturday, the 18th, and about twenty-five people have been in to look at it. I took it out and the man here took his two speed motorcycle and we tried them on a hill and I could pull with the clutch hooked up solid as slow as he could on low. That's good, I think; it more than comes up to the mark."

(Signed) V. E. YAPP.

Fulton, N. Y.

"I have ridden my machine about two hundred miles and am very much pleased with it, and would not let it go unless I could get one just like it. Everyone that has inspected my machine thinks that it has unheard of improvements upon other machines that are selling in this vicinity."

(Signed) WESLEY J. GOODFELLOW.

Won Gold Medal with Monarch Big 5, Brooklyn to Southampton. 200 mile endurance run. Large field, all makes represented. Monarch proves "King of them all."

W. KRACKOWIZER.

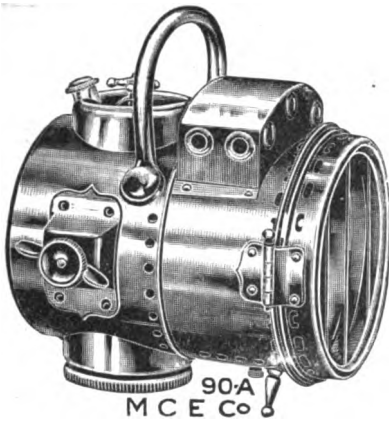
Write for our Dealer's
Proposition — TODAY.

Ives Motorcycle Corporation . .

Owego

Tioga County, N. Y.

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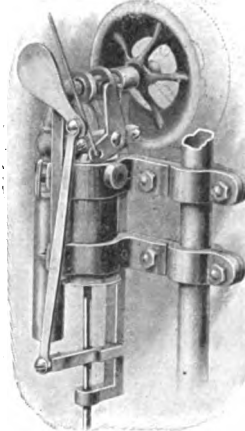


An Ideal Motorcyclists' Lamp

With a "Close Coupled Searchlight and Generator" Combined; Nickel Plated throughout, complete in every detail. No. 90 Rear Prop. No. 90A Side Props. List price each, \$6.00.

Get it from your dealer.

MOTOR CAR EQUIPMENT CO.
55 Warren Street Dept. M NEW YORK



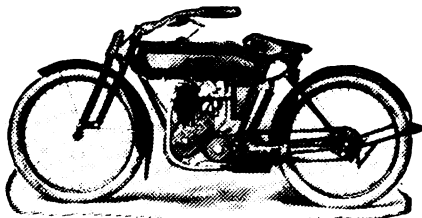
The Peerless Motorcycle Whistle

Produces a sound similar to that of a locomotive whistle. The sound can be varied from a low warning "toot!" to a shrill, piercing blast. Controlled from the handle bar, the Peerless carries further than any other warning device on the market. Its construction is simple—it cannot get out of order. Made of solid brass heavily nicked.

Price, postpaid, \$5.00

H. & H. Specialty Co.
19 Camfield St., Newark, N. J.

HAVE YOU TRIED OUT THE MOST POWERFUL TWIN BUILT? 10 H.P. Chain Drive Minneapolis DeLuxe



5 H.P.—CHAIN DRIVE—2-SPEED

The owner of this model never worries! Two-speed chain transmission takes care of him on hills and through sand and mud. The spring frame removes ALL road shock. "Ride one and see."

Minneapolis

IMMEDIATE DELIVERIES

are now being made on orders for

10 H. P. DeLuxe Twin Chain Drive

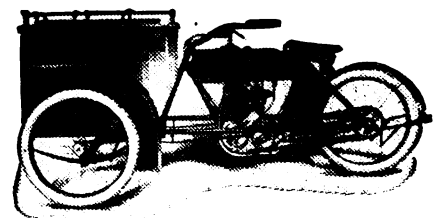
5 H. P. 2-Speed Single " "

5 H. P. Standard " Belt "

Tri-Car, 5 H. P., 2-Speed, Single, Chain Drive

WRITE FOR NEW ILLUSTRATED CATALOG

THE MINNEAPOLIS MOTORCYCLE CO., .: MINNEAPOLIS, MINN.



DEALERS How many retail merchants in your locality are looking for just such a DELIVERY CAR? 2-speed, chain drive, clutch; QUICK—ECONOMICAL—SATISFACTORY. Write for tri-car literature.



MOTORCYCLE PENNANTS

We make them for all machines, or with name of any town. Write for particulars and prices.

J. B. MEILER & SONS
Dayton, Ohio



RACING

Stadium-Motordrome

BRIGHTON BEACH PARK

CONEY ISLAND

Racing Every Wednesday, Saturday and Sunday Night

SEASON OF THIRTEEN WEEKS

For information regarding events address

BRIGHTON BEACH STADIUM CO.

41 Park Row

New York City

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

BOSCH EQUIP

For the F. A. M. Tours



WHEN a motorcycle is purchased the source of ignition is generally a Bosch Magneto, but other units of the system are seldom of equal quality unless the owner insists on Bosch Spark Plugs; then he is satisfied. When you buy plugs, buy Bosch Plugs, none is just as good.

We Solicit Your Inquiries

BOSCH MAGNETO COMPANY
223-225 West 46th Street NEW YORK

ON THE SQUARE

Do you believe in the
GOLDEN RULE?
if so **F. A. M.**

it's up to you to demand Honest Goods and a
SQUARE DEAL TOO



This Trade Mark appears on the Best

LEGGINS
CLOTHING
and **SPECIALTIES**

LOOK FOR IT, DEMAND IT

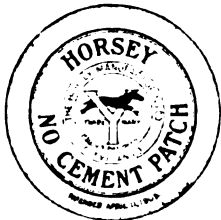
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NATHAN NOVELTY MFG. CO.
84A READE STREET NEW YORK

HORSEY

THAT'S THE NAME

**ONE
MINUTE
REPAIR**



**USE
GASOLINE
ONLY**

No Cement No Acid
INNER TUBE PATCH

One trial of Horsey No-Cement Patches and you will consign Cement and Acid Repair methods to the scrap heap and be dollars ahead by doing it.

Large Kit, box contains 12 assorted (large and small) patches, **\$1.00.**

Vest Pocket Kit, box contains 8 assorted (small) patches, **50 cents.**

Manufactured exclusively by

The Horsey Manufacturing Co.
5606 Euclid Ave., Cleveland, Ohio

The Hagstrom

The Highest Perfection
Any Spark Plug Has Attained

For consistency of performance, efficiency, long life, and absolute freedom from the troubles the ordinary spark plug is heir to, we earnestly commend

THE HAGSTROM

to your serious consideration.

With its wide, shallow chamber, guaranteeing the maximum of sparking power with a minimum of soot secretion, and other inimitable features, the HAGSTROM is the plug for you.

Official Plug of Kansas Short Grass Motorcycle Club.

Regular equipment for 1913 "INDIANS."

Price, \$1.00

HAGSTROM BROS. MFG. CO.

BOX 144

LINDSBORG, KANSAS

Write today for Gas Tank Key and Price List





THE 'BAXTER SIDE-CAR

**The Strongest, Lightest
Most Comfortable Side-Car
in the World**

Ten years of side-car manufacturing experience has qualified us to state authoritatively that the Baxter side-car is fit to cope with any and all road conditions in America.

Its chassis of seamless steel tubing, double truss frame construction and rigid mudguard give it enormous stability.

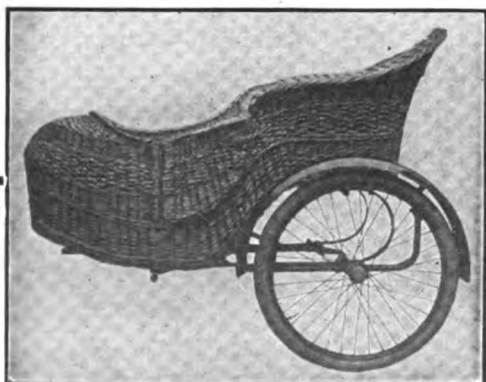
Yet so scientifically is the weight distributed that it is the lightest frame on the market. Then, too, the hub spindles, the most vulnerable point on a side-car, are turned from solid Bessemer steel.

Comfort is assured by its tension spring absolutely absorbing all shocks, its deeply upholstered basket of India rattan and its popular English shape.

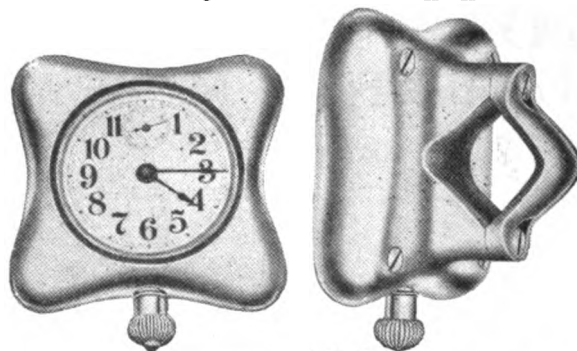
Note.—We make baskets to specifications. All parts quick-detachable and furnished separately if desired.

BAXTER SIDE-CAR CO.

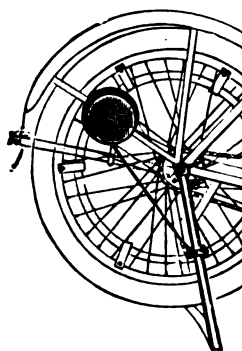
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CAMBRIDGE, MASS.



Motorcycle Supplies



OVERLEAF M. C. CLOCK
movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$3.50.



MOTORCYCLE STAND LIFT
avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
List, Each \$4.50.



SPARK PLUG UMBRELLA
should be used on all exposed engines where water is likely to come in contact with plug and cause short circuit.
List, Each .30.



"C" PATCH ASSORTMENT
contains 10 Ready-to-Use Patches, which require no cement. Patches are 1 1/2 inch—just right for punctures. Contained in air tight brass box moisture and rust proof.
List, Each .60.



O. K. JUNIOR TIRE TALC.
Handsome lithographed sifter top metal can, with friction bottom, which can be opened when empty for refilling. Measures 1 1/2 by 5 inches. Best quality talc. Highest grade package for purpose ever put out.
List, Each .10.



EAST INDIAN MICA PLUG,
made of best East India mica. Lateral winding instead of mica washers. Best motorcycle plug made.
List, Each .70.



5 INCH MOTORCYCLE PLIER.
High Grade. Finely nickel plated.
List, Per Pair, .50.

WHOLESALE ONLY.
Order through your dealer. Positively no correspondence or orders handled in any other way. Dealers, ask for 500 page catalog of motor and cycle material. Most complete line ever shown.

THE BECKLEY-RALSTON CO.
MICHIGAN AVE. AND RANDOLPH ST., CHICAGO.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Always Ask FOR ANDERSON MOTOR Glass and Steel Spark Plugs

Model A



Licensed Price, \$1.50

and you will get a plug that you can always depend upon—a plug that makes good by sparking every time, all the time and always on time.

THE ANDERSON GLASS AND STEEL SPARK PLUG

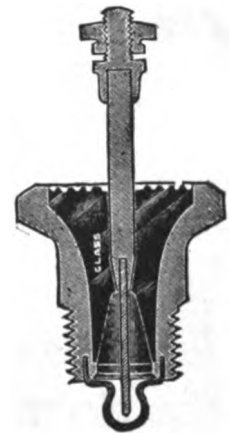
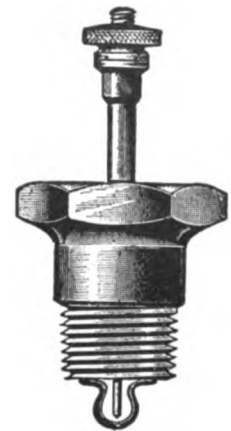
is made of glass and steel, the glass being welded by a patented process to the steel shell and central electrodes which forms one integral whole, making this plug the strongest and most enduring one on the market.

The Anderson Glass and Steel Plug is absolutely gas tight under highest pressure—it is a perfect insulator and provides a maximum of insulating distance within the limits of the plug—it is a perfect non-absorbent and, lastly, being made of glass, it provides a “window to the engine” so that every spark can be seen from the outside.

The Anderson Spark Plug will increase very materially the speed of the machine using it.

Any Style \$1.50 at Your Dealers

Model B



Licensed Price, \$1.50

FIRST A MOUNT MORE
BUT ULTIMATE COST LESS
ANDERSON SPARK PLUG CO.
206 No. HOLLIDAY ST., BALTIMORE, U. S. A.

"The Wise Distribution of Parts the Secret of Success."—Bacon.

**The
Big
Three**

Indian

Motorcycle
which uses

F & S Annular Ball Bearings

The Bowden Patent Wire Mechanism

TREMENDOUS INDIAN BUSINESS

Four Thousand Orders Behind—10,000 Machines Season's Total Output—T. T. Models Big Favorites.

"Decidedly the chief reason for these repeated increases of output may be said to be the phenomenal and utterly unlooked for popularity which the Tourist Trophy models achieved as soon as they were announced. It was thought that this year, at least, the run of T. T.'s would be comparatively light, owing to the high price and the many innovations embodied in them. Instead, the demand exceeded the company's fondest expectations, the run on these models exceeding that of the rest of the line combined. Then, of course, there is to be considered the European business, which is entirely supplied by T. T. models.

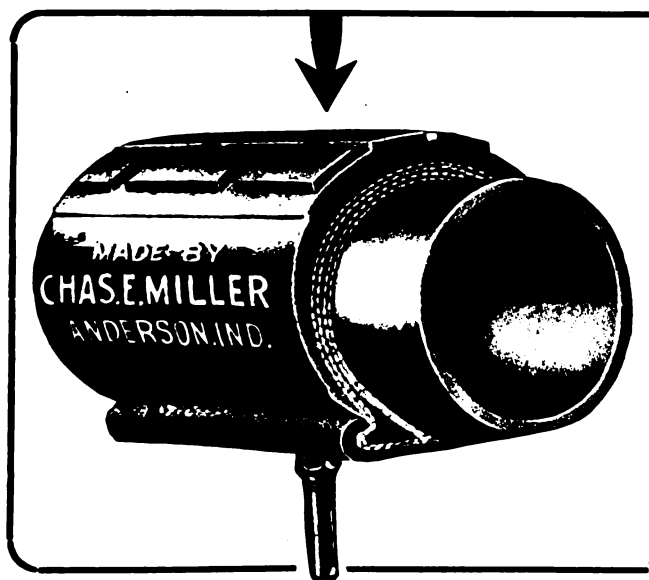
"Price has been a totally negligible factor in Indian business this year, the buyers almost invariably ignoring this factor in booking their orders."

Bicycling World and Motorcycle Review, June 8, 1912.

BRETZ COMPANY
F & S
Ball Bearings
250 West Fifty-fourth, New York

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Miller means more mileage



The Miller Non-Skid Block Tread Tire

satisfies the demand for a stronger and larger tire. Its construction is such that it can withstand the most severe road conditions with minimum wear.

EXPRESS PREPAID TO ALL POINTS

MILLER'S NON-SKID "BLOCK TREAD" MOTORCYCLE TIRES

Size	Tubes & Casings guaranteed	Strong Tube	Tube Casing
20x2 1/4	"Block Tread" S. C. or D. C.	\$2.25	\$8.10
28x2 1/4	"Block Tread" S. C. or D. C.	2.48	9.00
28x2 3/4	"Block Tread" S. C. or D. C.	2.48	10.80

MILLER'S CORRUGATED "STANDARD ROAD" MOTORCYCLE TIRES

Size	Tubes & Casings guaranteed	Strong Tube	Tube Casing
26x2 1/4	Corrugated S. C. or D. C.	\$2.25	\$7.20
28x2 1/4	Corrugated S. C. or D. C.	2.48	8.10
28x2 3/4	Corrugated S. C. or D. C.	2.48	9.00

Our 44-page catalog, covering Auto Tires, Tire Repair Stock and Tire Re-Liner, is yours for the asking.

We also make the standard grade tire, which is corrugated. This tire is lighter, but of the same quality of rubber and friction.

WE WILL TELL YOU MORE IF YOU ASK US.

CHAS. E. MILLER
Anderson Rubber Works
Anderson, Ind.

If You Saw Them You Would Buy Them

There's a Whole Season's Mileage and More, in These
\$3.00 CASINGS

They are in Excellent Condition and Guaranteed

G and J, M and W and Goodrich

28 or 26 x 2 1/4 Shoes, that will fit 2 1/4 Rims if required

BAKER'S INFALLIBLE LINE includes everything a motorcyclist needs at saving prices.



Price Complete,
\$3.00



MODEL No. 2

Model No. 1, \$7.50

BAKER'S INFALLIBLE EXHAUST WHISTLE

This signal is the simplest and most perfectly designed whistle on the market. Very easy to attach. Held securely by two bolts. Absolutely free from clogging by carbon. Gives an intense piercing sound. Made of brass, highly nicked.

INFALLIBLE SPEEDOMETER

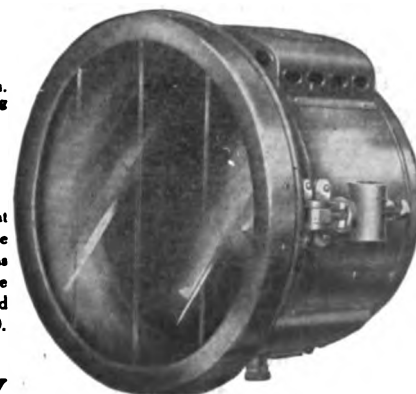
A perfectly adjusted and constructed instrument tested for accuracy. Guaranteed for satisfactory service. Steady registering hand. Made in three models: No. 1, registering speed only, price \$7.50; No. 2, measuring season's mileage and speed, \$10.00; No. 3, season and trip mileage and speed, \$12.50. Mention make of motorcycle when ordering. Rear attachments furnished unless otherwise specified.

No. 2, \$10.00

No. 3, \$12.50

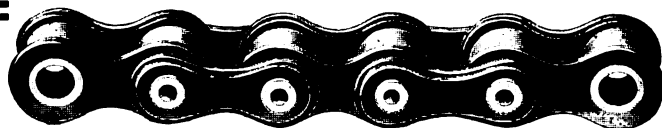
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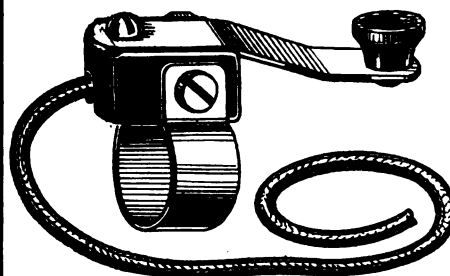
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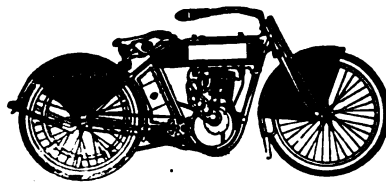
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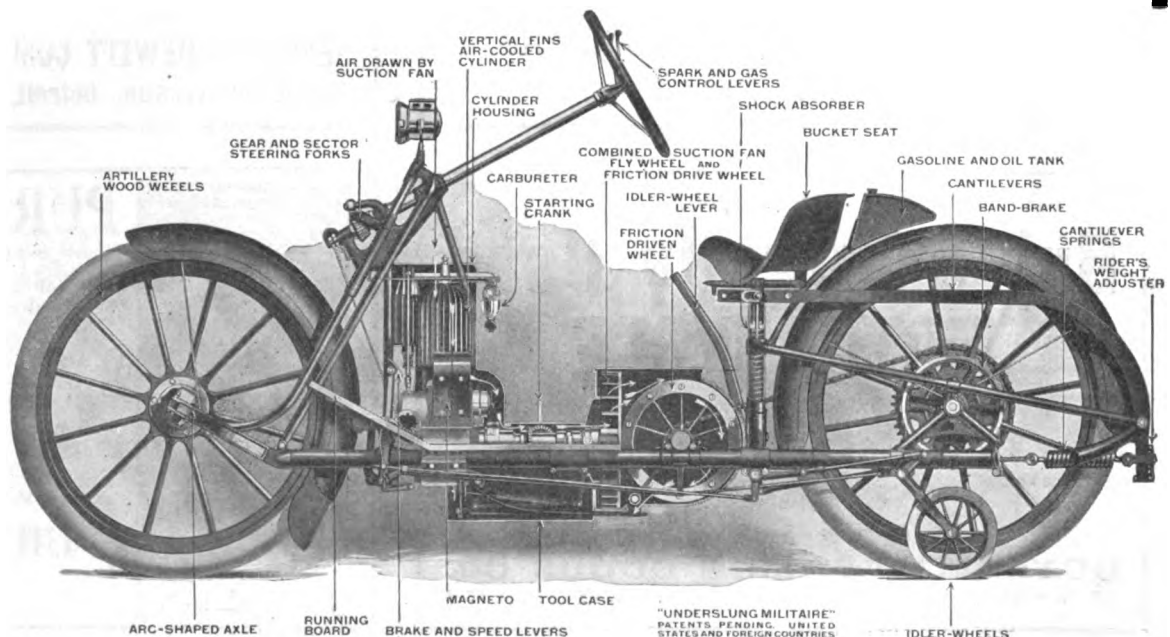
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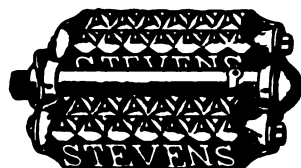
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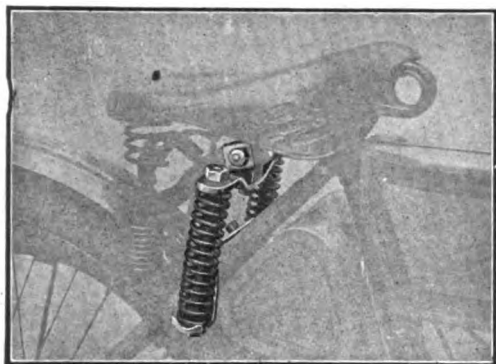
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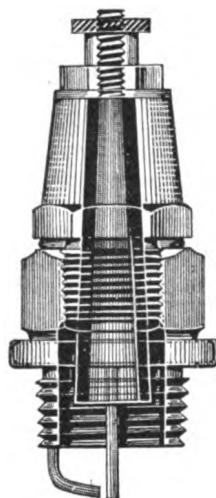
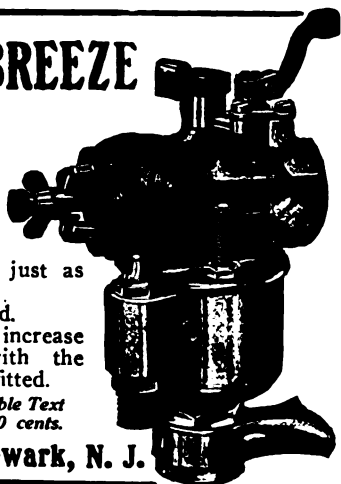
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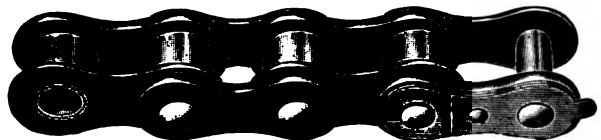
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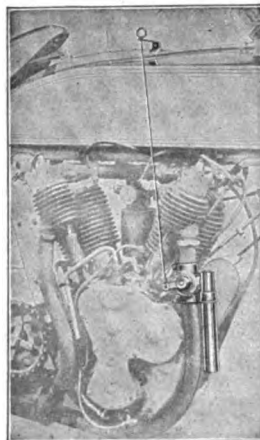
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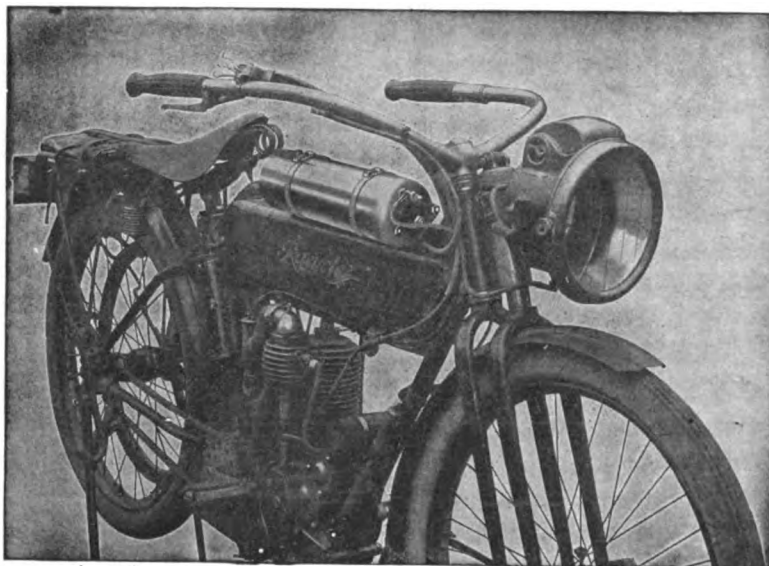
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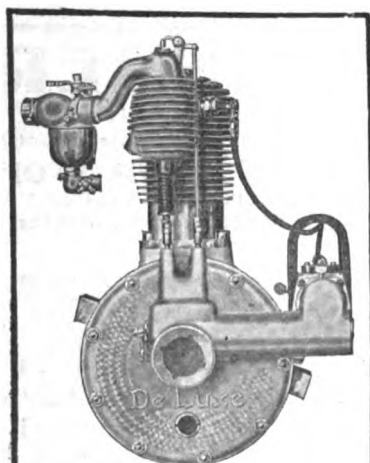


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Simplified design throughout.
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Large ball bearings mounted in steel lined pockets.
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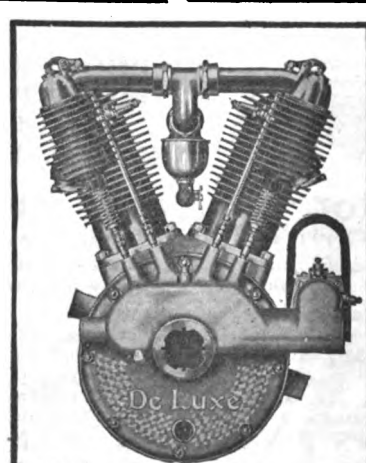
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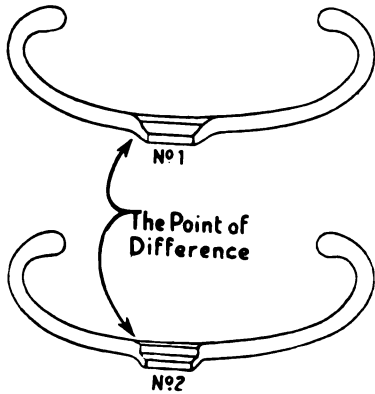
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Our products for the Cycle Trade include:

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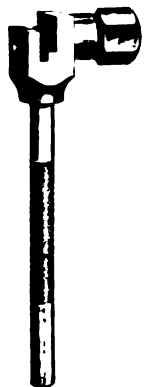
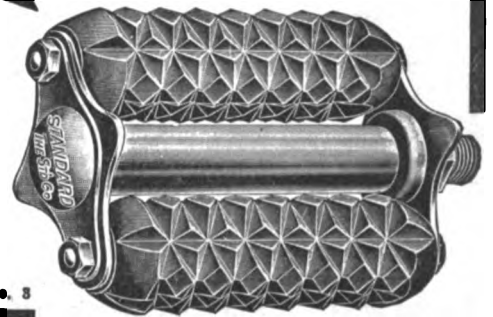
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Warns Without Giving Offense
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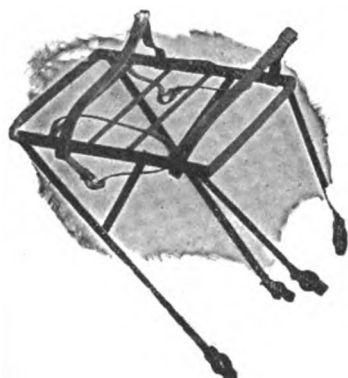


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When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

FEDERAL TIRES

for "Extra Service"

THESE are the motorcycle tires that reduce up-keep expense—that's why they are acknowledged to be the tires of "Extra Service."

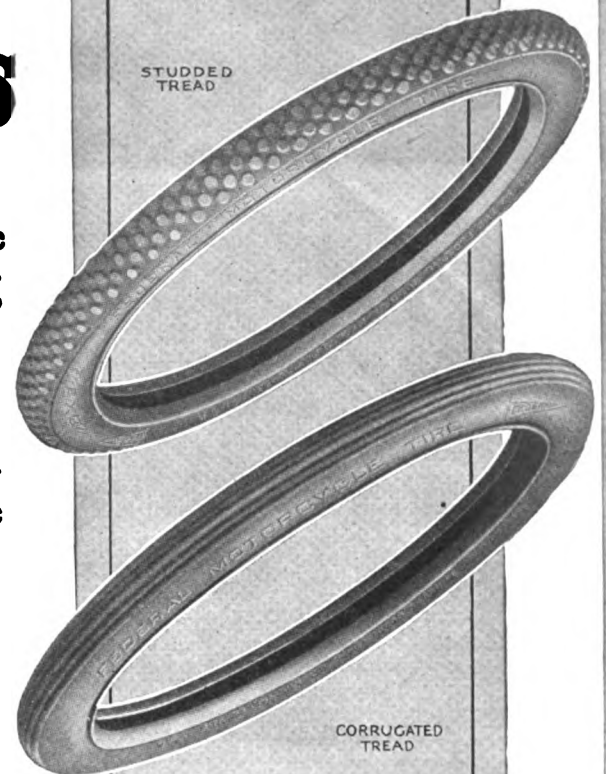
Federal Tires are of unusual quality. It is impossible to use finer materials, or exercise greater skill in their construction—and as a result of this care and expense in their making they deliver the utmost in mileage service.

Federal Motorcycle Tires come in both Corrugated and Studded Treads in all sizes and in single and double clinch types.

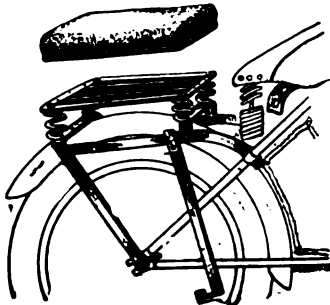
They are supplied through leading dealers everywhere. Interesting tire book mailed on request.

Federal Rubber Manufacturing Co.—Milwaukee

Branches and Agencies:—New York, Boston, Chicago, Kansas City, Minneapolis, Denver, Indianapolis, Columbus, St. Louis, Louisville, Omaha, Houston, San Antonio, Little Rock, Atlanta, Los Angeles, San Diego, Pasadena, New Orleans, Portland.



HOWELL'S Combination Tandem Attachment and Luggage Carrier



Nothing on the market to compare with it in quality, price and appearance.

IT FITS ALL MACHINES
WRITE FOR PRICES

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Save One-Quarter

the purchase price of motorcycle accessories and parts. We sell guaranteed goods twenty-five per cent cheaper than any other house

THE MOTOR CYCLE CO-OPERATIVE COMPANY
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Manufacturers of a complete line of Leggings, Tool Rolls, Combination Luggage Carriers, Tail Lamps and many other useful accessories.

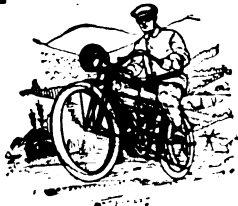
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Ride the **M·M** 4 to 8 H. P.
Good Old \$140 to \$225

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Motorcycle Tours in the United States

350 Routes over the best
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561 Pages

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STANDARD BEARINGS



are



Enemies of Friction

Why don't you "Standardize"?

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The Famous Spark Plug

Guaranteed for Life
(Including Porcelain)

Not only do we guarantee easier starting, more power and less gas—but we guarantee this service for Life.



Is a life-time of trouble-proof spark-plug service not worth \$1.25 per plug?

At all reputable Dealers.

Your Community has a V-Ray Dealer

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Governs and administers the sport of Motorcycle racing and other competitions in which motorcycles engage; it defends and protects the rights of motorcyclists and facilitates touring; it encourages the use of motorcycles and promotes the general interests of motorcycling.

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Large size, \$1.00 Small size, \$.35

RUBBER-MEND Motorcycle Outfit. It makes its own patch—repairs punctures in the tube and repairs cuts or blowouts in the outer casing. It will also repair football and basketball bladders, or ANY KIND OF RUBBER ARTICLES.

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Steepest Track in the World.

Record-Breaking Attendance.

Races are held on Wednesday, Saturday and Sunday nights.

No racing or sport of any other kind has taken Cleveland and surrounding territory by storm as the motorcycle races have on Luna Track.

Every possible courtesy and consideration are shown to riders by the Management and the Public.

The Luna Park Amusement Company

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Economy Is The Keystone Of Success

If you want to make the first long step toward true economy in the purchase of guaranteed motorcycle supplies and accessories, send for our large illustrated catalog. It will save YOU Money.

OBERWEGNER MOTOR CO.
Toledo, O.

Bowen Bros. Side-Seat

Designed to meet a long sustained demand for a practical, comfortable tandem attachment.

It is so made that the weight of the second rider comes directly over the rear axle, thus materially improving the balance of the machine.

Roomy, upholstered seat, with nickel plated hand rail, mud guard, large rubber foot rest.

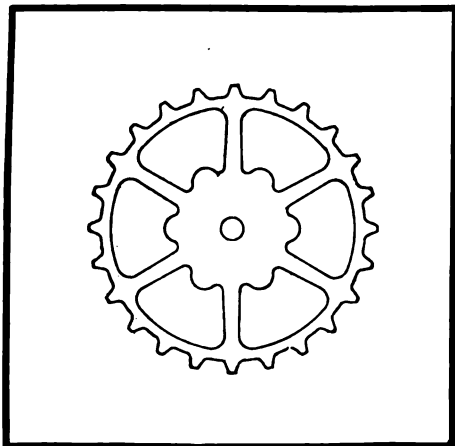
Size, 12½ x 20 inches.

Write for our booklet.

BOWEN BROS., 54 South St., Utica, N.Y.



SPROCKETS

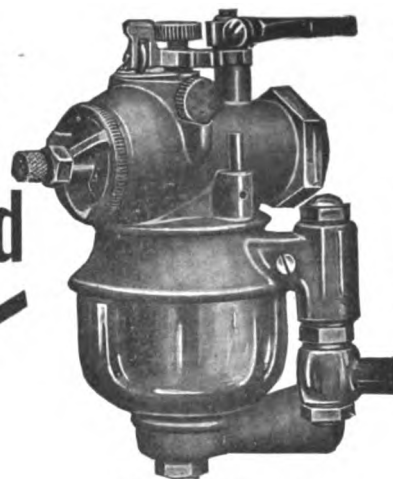


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Cleveland, Ohio

**More
Speed**

**More
Power**



Model G-D—Price \$10.00.
Metal or Glass Bowl.

THE HEITGER CARBURETER

Model H, new type, has but *one* gasoline adjustment, but *two* feeds, one for high, one for low speeds, feeding from separate nozzles, giving maximum results at both speeds and intermediate with simplicity and reliability. No amount of vibration can affect it. Any speed easily adjusted and *stays* adjusted. Satisfaction guaranteed on *any* make of machine; adopted by manufacturers for 1912.

Model G-D is our double adjustment, or mechanical needle valve type, which has been used for two years by leading manufacturers and thousands of riders with best of satisfaction. As some prefer this we will continue to make it. Either type gives maximum results with minimum of fuel.

WE'RE FAIRLY SWAMPED WITH LETTERS LIKE THESE

Dallas, Texas, April 8th, 1912.

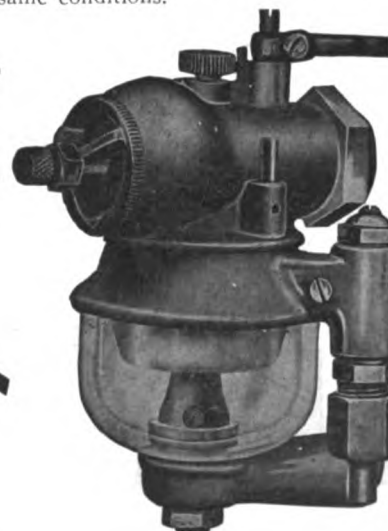
H. A. SIMPSON, Dallas, Texas.—This is to let you know that I am riding a big powerful 8 h. p. twin cylinder motorcycle equipped with one of your Model G-D double adjustment carbureters.

I have tried three other makes of well-known carbureters, and find by actual experience on the road that the Heitger gives more power and speed, greater flexibility and is more economical than any other I have ever used or tested.

With the Heitger I have made a record of thirty-five miles on one pint of gasoline, this being done against a strong wind on a rough, hilly road, with a big twin thrown into the bargain. I have also had the satisfaction of increasing the speed of my machine over twelve miles per hour, and while I do not claim that these things are world's records, let the fellows with the other carbureters beat it if they can, and under the same conditions.

**Heitger
Car-
bureter
Co.**

1200
Beecher St.
Indianapolis,
Ind.



Model H—Price, ¾ in., \$9.50; 1 in., \$10.00.
Metal or Glass Bowl.

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

For All Machines

There is no device on the market so peculiarly applicable to every make of machine, no matter whether it be a 1907 or a 1912, as the

Eclipse Free Engine Clutch

We have made thousands of Eclipse Clutches this year so far, and will make many more during the balance of the year, and will make twice as many next year. And the beauty of it all is—there isn't a single clutch we have made **THAT HAS NOT GIVEN ABSOLUTE SATISFACTION AND EFFICIENT, RELIABLE SERVICE AT ALL TIMES.** Let us make this plain to you—we *haven't had a complaint since we started!*

The ECLIPSE FREE ENGINE CLUTCH does three things and *does them well.*

First—It puts into the discard the old method of starting; climbing on and pedalling by main strength for half a block, before the motor picks up; or running alongside and taking a flying leap into the saddle. That's an awkward way—it prejudices a prospective buyer. With the ECLIPSE all you have to do is to climb on the machine, pedal a couple of revolutions, lift your stand and glide away easily as a touring car.

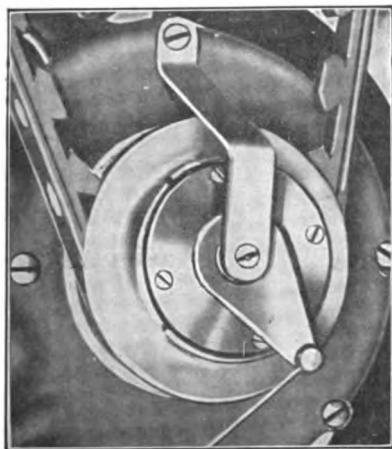
Second—it affords the widest range of speeds. When traffic riding, the ECLIPSE enables you to throttle down to five miles or even less an hour.

Third—On hills, in sand, mud or snow, the ECLIPSE enables you to negotiate

it is necessary either to coast back to the bottom or push the machine to the top. With the ECLIPSE, all that is necessary to do is to lower your stand, climb on, pedal once or twice, lift your stand and continue to the top of the hill. Simple, isn't it?

Simplicity of control—the ECLIPSE is supplied in either handlebar or side lever control. *Small number of parts*—the reason why we haven't received any complaints is because there is nothing about the ECLIPSE FREE ENGINE CLUTCH to get out of order.

The Eclipse Free Engine Clutch



The Clutch of many Speeds

For the rider who wants to lift his old machine out of the has-been class and make it a standard 1912 model—for the dealer who is desirous of handling an article which is absolutely guaranteed not only to give universal satisfaction, but practically sells itself—for the manufacturer who wishes to add a potent selling point to his machine, the ECLIPSE FREE ENGINE CLUTCH fills the bill.

Mr. Dealer—Now is the time to replenish your stock of ECLIPSE FREE ENGINE CLUTCHES. If by any chance you are not now handling the ECLIPSE, write for our proposition. You can't afford to wait.

ECLIPSE MACHINE CO.

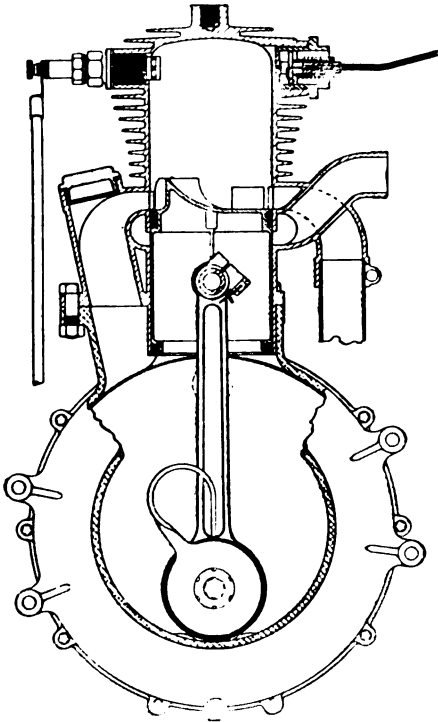
ELMIRA, N. Y.

MOTORCYCLE TALKS

No. 9

(NOTE: This is the ninth instalment in the series of talks now appearing in the motorcycle papers dealing with those practical features that you should look for in the machine that you require for everyday service.)

Carburetion in the Schickel Motor



Five Years Ago

It was in the spring of 1907 that Mr. Norbert H. Schickel put his two-cycle engine into his first motorcycle. This machine could show a mile a minute on a level road, it negotiated easily a 50% grade and the motor was silent in its operation.

That was five years ago—a performance that is hard to duplicate today with any machine at any price.

It took five years of persistent and intelligent effort to bring the Schickel motor to its present high state of development. The 1912 motor in the main resembles the early 1907 model but certain changes have been made by way of introducing refinements in design.

THE INTAKE WITH A DOUBLE CURVE

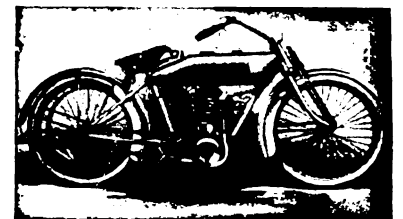
The 1912 Schickel Valveless Two-Stroke motor takes the gas into the crank case through a double curved passage. This passage is completely surrounded by the exhaust gases. When a particle of fuel strikes the hot wall it gasifies and a thorough vaporization of the fresh charge is assured.

You can throttle this motor to four miles an hour. It will start on a quarter turn of pedal crank and thirty seconds later show maximum road speed. You can use this motor everyday for a whole season and still find the cylinder clean. The ingenious design of the intake passage makes it impossible for liquid fuel to enter the crank case. The charge is thoroughly gasified and burns clean.

The double curve intake is one of the many features that justifies our claim—The Master Motorcycle. Request us to send you literature describing all features.

**DEALERS
WRITE FOR FURTHER
INFORMATION**

Send a Postal Today

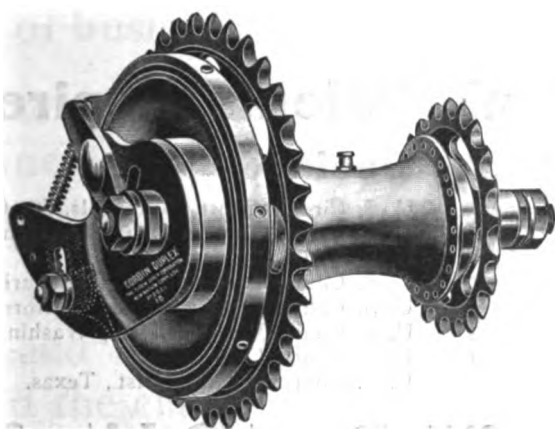


The Schickel Motor Company, 59 Garden St., Stamford, Conn.

Distributor for Southern California, L. E. French, 16th and Hill St., Los Angeles

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OVER 75% OF ALL THE MOTORCYCLES
AT THE F. A. M. MEET AT COLUMBUS,
OHIO, WERE EQUIPPED WITH THE



Corbin Duplex Motorcycle Brake

This Brake is the choice of both
the motorcycle manufacturer and the
experienced rider who know the ad-
vantages of Corbin construction and
reliability.

For Sale by the Trade.

THE CORBIN SCREW CORPORATION

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WESTERN DEPARTMENT: 65-67 West Lake Street, Chicago, Ill.

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The Truth Regarding The Gas Tank Patents

The U. S. Court for the Northern District of Illinois has, on final hearing, re-affirmed its previous decision in the gas tank patent case.

The case will now be appealed to the U. S. Circuit Court of Appeals, 7th Circuit, and a decision which will settle the controversy is expected in the fall.

Until a final decision is reached, the dealer is advised not to jump at conclusions. Meanwhile, these facts may be of interest:

Have the Gas Tank Patents Expired ?

Decided "Yes"

U. S. Court, Northern Dist., Illinois.

Decided "No"

U. S. Circuit Court of Appeals, 6th Circuit.
U. S. Court, Eastern Dist., Michigan.
U. S. Court, Indiana.
U. S. Court, Eastern Dist., Missouri.
U. S. Court, Southern Dist., California.
U. S. Court, Western Dist., Washington.
U. S. Court, Colorado.
U. S. Court, Western Dist., Texas.

Can Other Firms Re-fill Prest-O-Lite Tanks ?

Decided "Yes"

U. S. Court, Northern Dist., Illinois.

Decided "No"

U. S. Court, Eastern Dist., Wisconsin.
U. S. Court, Western Dist., New York.
U. S. Court, Indiana.
U. S. Court, Northern Dist., Texas.
U. S. Court, Eastern Dist., Michigan.
U. S. Court, Eastern Dist., Missouri.
U. S. Court, Southern Dist., California.
U. S. Court, Western Dist., Washington.
U. S. Court, Colorado.
U. S. Court, Western Dist., Texas.

One Case Already Decided by Higher Court

The decision in the U. S. Court for the Eastern District of Michigan, favoring The Prest-O-Lite Co., has already been affirmed on appeal by the U. S. Circuit Court of Appeals, 6th Circuit.

Appeal in the case just decided at Chicago is being taken to the U. S. Circuit Court of Appeals, 7th Circuit.

We wish merely to emphasize this:

Until this appeal has been decided by the higher courts, the questions involved in the gas tank patent suits are not SETTLED, even as against the defendant in this one case.

The Prest-O-Lite Co., Indianapolis, Ind.

Charging Stations and Branches in All Principal Cities.

Regardless of the Final Decision on Gas Tank Patents, No Dealer Can Afford to Overlook These Points:

- 1st—Every concern that has tried to win agents and customers away from Prest-O-Lite has failed to do so; and ALL except those involved in the present law suits have gone out of business.
- 2nd—In each and every case, where the gas tank maker quit the business, the dealers have “held the sack” on worthless tanks that could not be re-filled.
- 3rd—Every company, past or present, that has claimed “more gas and better gas than Prest-O-Lite” has failed to make good the claim.
- 4th—Every company, past or present, that has promised an adequate exchange service to compete with Prest-O-Lite, has fallen down.
- 5th—Prest-O-Lite is, and will continue to be (no matter how the patent cases finally go)

The ONLY gas tank backed by adequate exchange service.

The ONLY gas tank that motorists and the vast majority of dealers will have anything to do with.

The ONLY gas tank that a dealer can handle without risk of “holding the sack.”

The ONLY gas tank that will pay the dealer the profit he has a right to expect.

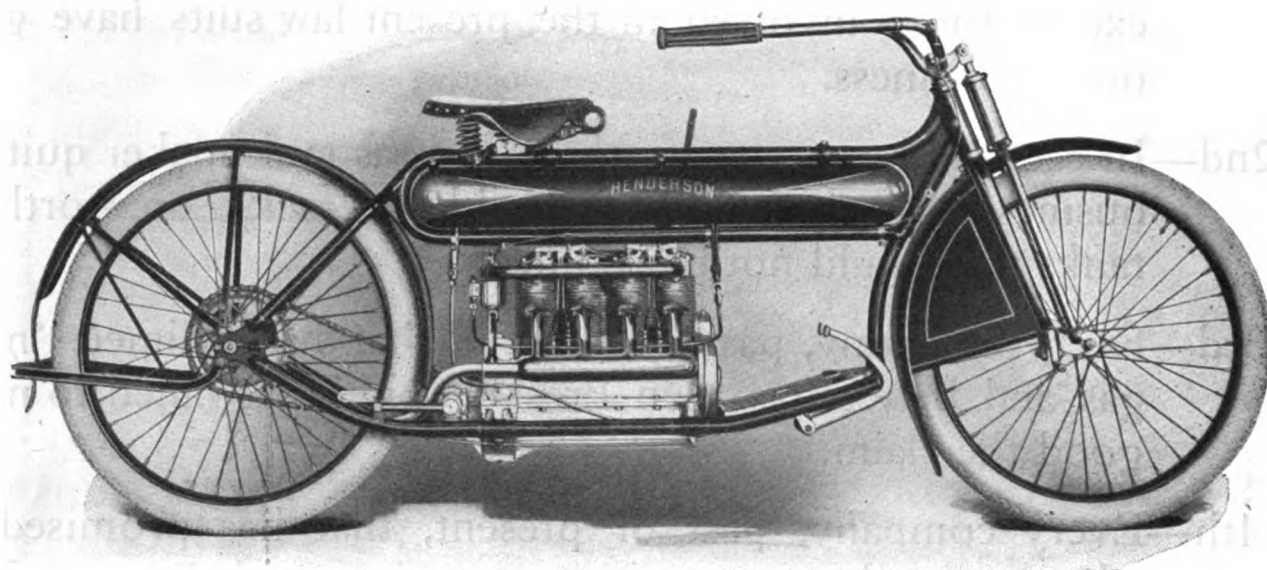
**Prest-O-Lite has always MADE money for dealers.
Imitations have always LOST money for dealers.**

The Prest-O-Lite Co., Indianapolis, Ind.

Exchange Agencies EVERYWHERE.

We Ask You to Take One Ride
on the

HENDERSON MOTOR CYCLE



7 h. p. 4 Cylinders; free engine, no pedals, chain drive—\$325

Ride on the Henderson once—and we are willing to leave the rest to your own judgment.

If you can do this and not come instantly to the conclusion that the Henderson is the greatest machine—in every respect—that you ever bestrode, we shall have nothing more to say.

You crank the Henderson by hand, mount and engage the clutch.

Instead of keeping your feet in uncomfortable positions on a pair of pedals and cooking your legs with the heat of the motor, you rest your feet on a foot-board well forward of the motor.

Instead of being shaken like jelly by the engine's vibration, you ride at ease.

Instead of having your ears filled with an exhaust crackle as sharp and nerve-racking as musketry fire, you hear only a low, business-like hum from the motor.

These are the things we want you to find out for yourself, in your own way and to your own satisfaction.

You can easily do it, as there doubtless is a Henderson dealer in your town.

If you don't know him, write us at once.

HENDERSON MOTORCYCLE CO., 1158 Cass Avenue, Detroit, Mich.

Dealers, Write for terms and territory

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X - R A Y

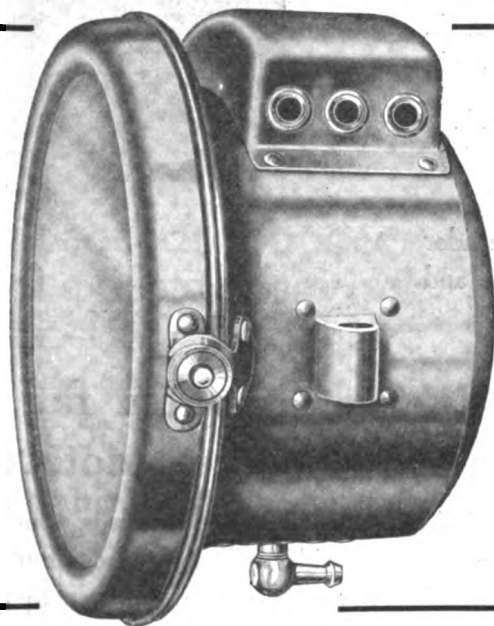
Sensation of the season. A new high-grade motorcycle lamp called the X-RAY at a price within reach of all. This lamp is being put on the market by the largest automobile lamp factory in the United States. We have had years of experience in making lamps for automobiles and motor trucks where excessive vibration must be overcome and we have constructed the X-RAY so there is no possible chance for the lamp to rattle or fall apart.

On account of our enormous automobile lamp business we are able to name a very low price so that we can secure a volume of business.

We want all jobbers and dealers to write for our proposition. Mention your buying capacity and let us send you samples prepaid express on approval.

READ THE SPECIFICATIONS

Front measurement $7\frac{3}{4}$ ", body measurement 6", genuine magnifying mirror lens 5". Props soldered and riveted to body. Hood or ventilator riveted to body. Body stamped of one piece heavy metal. Heavy



hinge and door catch thoroughly riveted. Lens (reflector) fastened with removable lugs, lens can be replaced in a few seconds, screw driver all that is necessary. Adjustable focus, can throw light in front of wheel or 200 feet ahead if necessary.

We are furnishing the X-RAY in two finishes, black and nickel and full nickel. All automobiles for 1913 are equipping with black and nickel finish on account of being so easily cleaned and never looking shabby. Our black enamel is baked at high heat and can be cleaned same as the motorcycle. It is guaranteed not to chip off.

TO RIDERS. The regular price of the X-RAY, black and nickel finish, is \$5.50, full nickel \$6.00, but to introduce X-RAY, knowing your friends will also want one, we are making the following special offer for 30 days. Black and nickel \$4.75, full nickel \$5.00, express charges prepaid. Send Postal order with order.

JOBBER AND DEALERS WRITE FOR TRADE DISCOUNT

Western Sales Room
FULTON GRUBB CO.
1146 Michigan Ave.
CHICAGO, ILL.

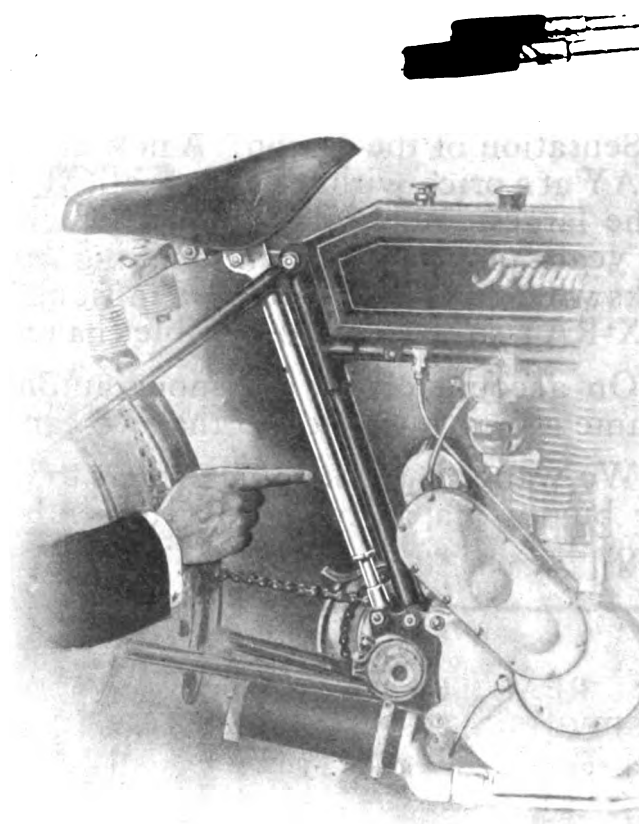
THE VICTOR LAMP CO.
CINCINNATI, O.

Eastern Sales Room
T. F. RUSSELL & CO.
170 Summer St.
BOSTON, MASS.

**WE POINT OUT TO YOU
THAT THE TRIUMPH
"NOJOLT" SEAT
IS A DISTINCT FEATURE
WITH A WIDE RANGE OF ACTION**

It has swivel action at three points and ball bearings. The rider sits on the shock absorber and not away from it. It suspends the rider practically on air. Does not impair the rigidity of the motorcycle frame; thus, wheels and transmission are always in alignment.

This device not only relieves the rider from all fatigue but eliminates shocks and strains from the entire motorcycle.



Triumph "NOJOLT" Seat is not a fad talking point, it is a necessity. One that now makes motorcycling a pleasure.

One would think that this is the only feature the Triumph possesses. Such is not the case. We just desire to impress upon your mind, that from now on, the rider will demand comfort and some other valuable features he has not enjoyed. There are other things more valuable to the average motorcyclist than excessive speed all of which the rider is now seeking.

Triumph Motorcycles

are built for comfort, for body and mind.

The "NOJOLT" features give the body comfort, while its sturdiness and strength relieves the mind from receiving jolts from repair bills. If you have received and read our booklet, "Brass Tacks", then send for the one called "A Celluloid Cat".

TRIUMPH MANUFACTURING COMPANY

51-55 East Woodbridge Street

Detroit, Mich.

FEDERAL TIRES



THESE "Extra Service" tires constantly gain in popularity. Pronounced favoritism is shown for them among motorcyclists who understand the true meaning of *mileage*. In point of tire upkeep Federal Tires afford a decided saving. *They endure.* But they also have other distinctive advantages that appeal strongly to motorcycle riders.

Federal Tires are comfortable because of their wonderful elasticity and their exceptional ability in absorbing road irregularities. They are speedy, safe and easy riding.

The main reason for this big preference for Federal Tires is summed up in one word—*Quality*—simon-pure—unadulterated "all-wool-yard-wide" quality.

Federal Motorcycle Tires are supplied through leading dealers everywhere. Interesting tire book mailed on request

Federal Rubber Manufacturing Co., Milwaukee

Branches and Agencies: New York, Chicago, Boston, Kansas City, Denver, Atlanta, Los Angeles, San Diego, Pasadena, Portland, Louisville, Indianapolis.

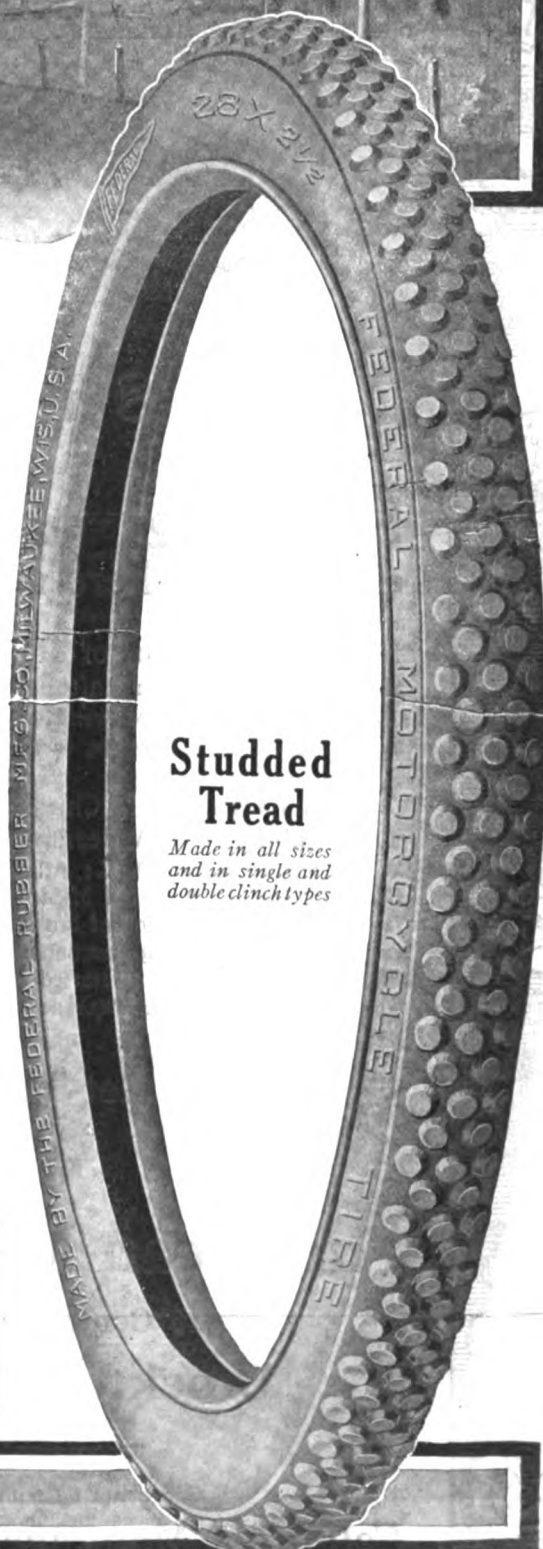


Corrugated Tread

Made in all sizes and in single and double clinch types

Studded Tread

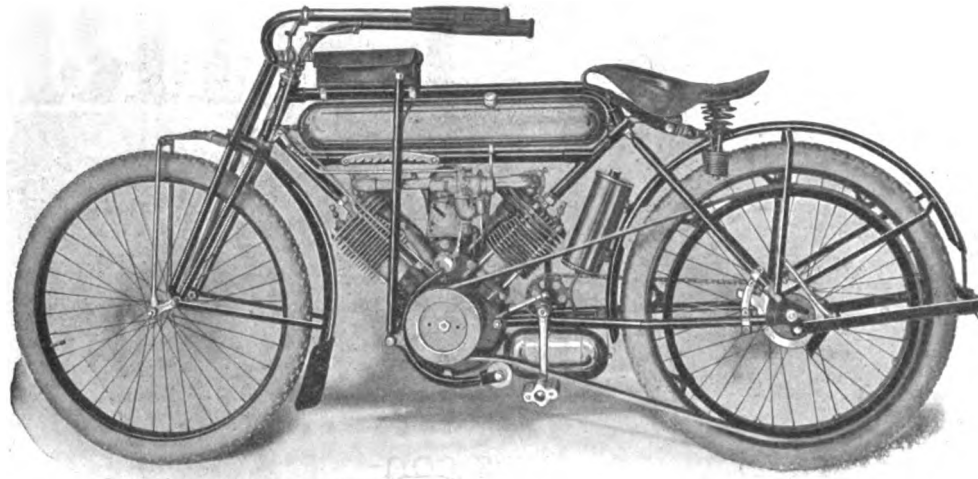
Made in all sizes and in single and double clinch types



**Endurance
Power**

M-M

**Simplicity
Comfort**



8 H. P. Twin, \$225

Speaking of tours and motorcycle endurance, here is an eye-opener.

Mr. F. W. Baum, of Champaign, Ill., surprised us Saturday (July 13) by arriving at the factory after covering a distance of 1,606 miles, by speedometer, in 7½ days' riding, an average of over 214 miles per day. Any experienced rider will admit that this does not allow time for much tinkering en route. You can figure it out yourself from the following itinerary:

Champaign, Ill., to Chicago, and return. Indianapolis. Thence by the National Pike to Columbus, Ohio; Wheeling, W. Va.; Uniontown, Pa.; Cumberland, Md.; Martinsburg, W. Va.; Washington, D. C.; Atlantic City; Baltimore, Md.; Philadelphia; New York; Boston, and Brockton, and the good old M-M was in perfect running order, and as good as new upon arrival at the factory, with the exception of broken pedals, and a very thick coating of mud, which testified to the extremely difficult riding encountered by this stalwart 187-pound student of the University of Illinois. Filled with enthusiasm, he started today, July 22, on a tour through Europe and the British Isles. You will hear more about the endurance of our machine on this trip in MOTORCYCLE ILLUSTRATED later on.

**For Get-There-and-Back Dependability—
Ride the M-M Twin!**

American Motor Co.

716 Centre Street
Brockton, Mass.

California Distributor

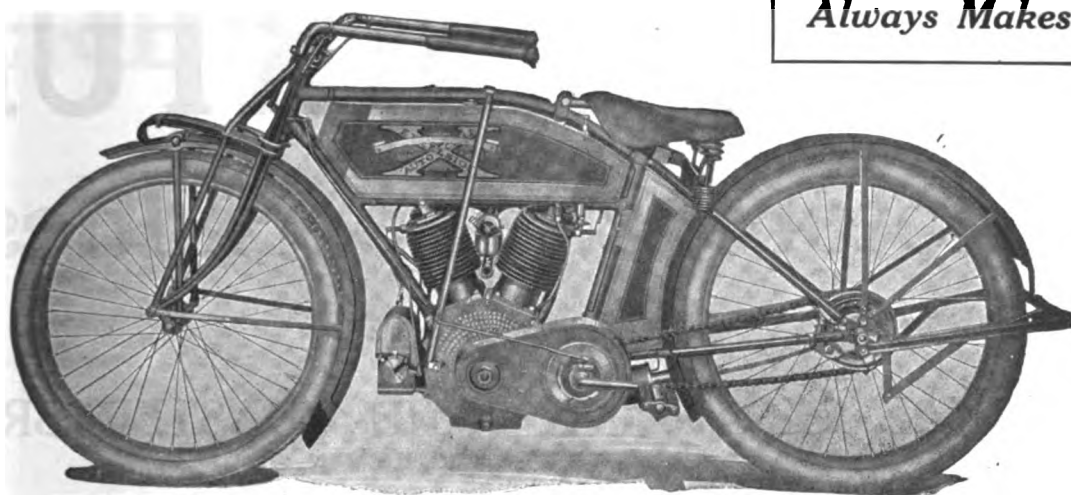
California Motorcycle Company

818 S. Main Street - - Los Angeles, Cal.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

*"The Machine That
Always Makes Good"*



EXCELSIOR AUTO-CYCLER

LEADS

The feature of the big F. A. M. tour, just completed, was the splendid showing made by Excelsior Auto Cycles. They came through where others failed—not one turned back for any trouble due to the machine.

For Hard Service Get An Excelsior

J. H. Matanle, Assistant Tourmaster of the N. E. Division, went in the ditch near Cleveland, but he is still an Excelsior booster.

"I plowed through sand," he says, "over ruts, up hills almost wide open for hours. I don't think there is another machine that would have stood it. Even after I went into the ditch, at fifty miles an hour, I only temporarily disabled my Excelsior 7."

Investigate for yourself

EXCELSIOR MOTOR MFG. & SUPPLY COMPANY

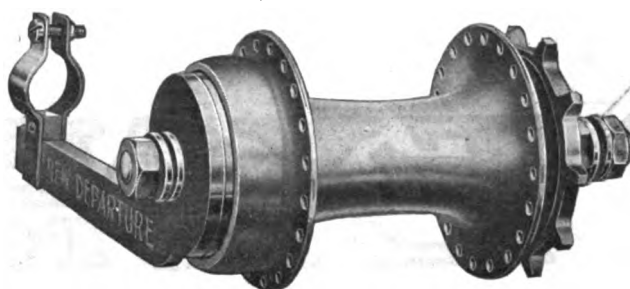
2201-2259 UNION STREET, CHICAGO

NEW DEPARTURE

Motorcycle Specialties

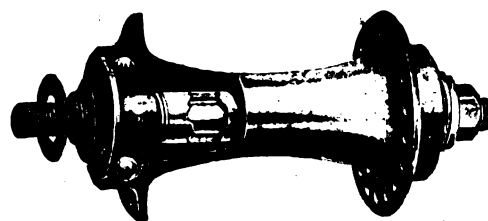
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



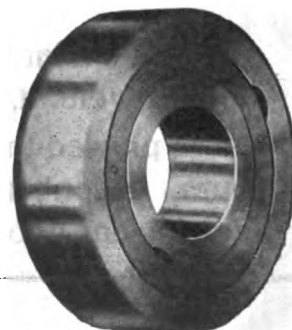
"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and gives maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen $\frac{1}{4}$ -inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



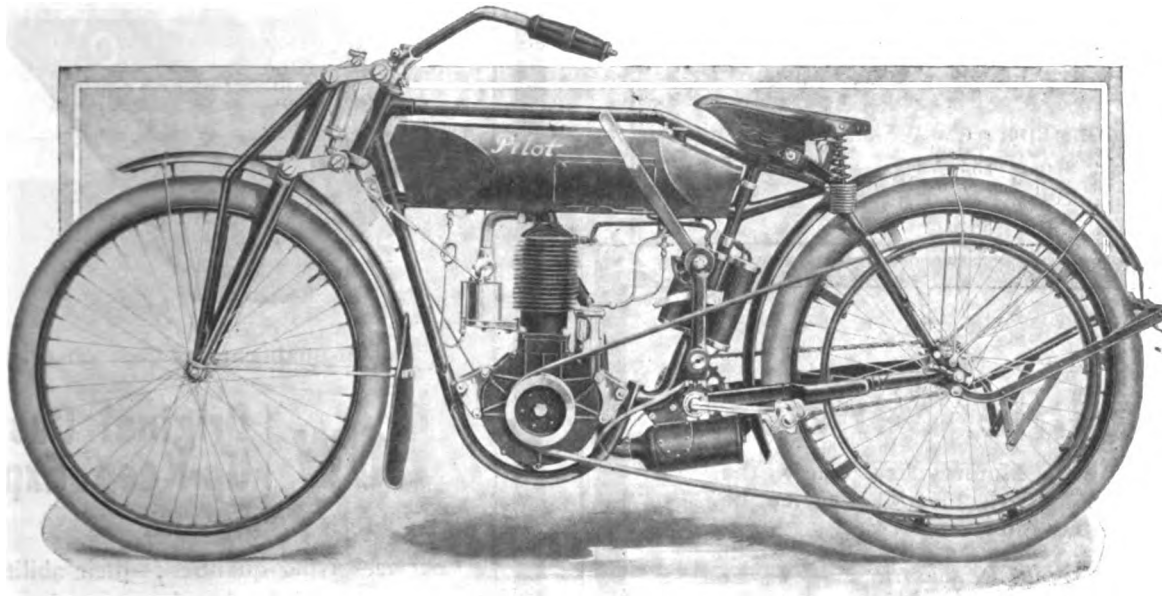
Write Today for Literature

THE NEW DEPARTURE MFG. CO., Bristol, Conn.

COASTER BRAKE LICENSORS

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The BROOKS B170; embodies the BROOKS Patent Compound Springs and—being anatomically shaped, you sit **IN** it rather than **ON** it.

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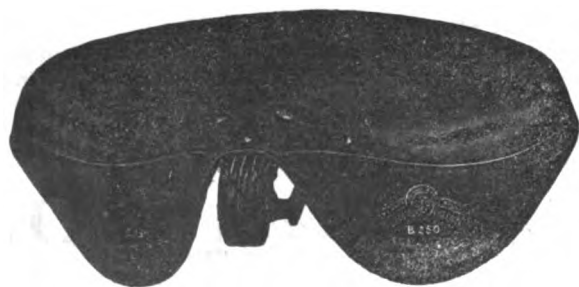
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The BROOKS B250—a low-built seat specially designed for motorcycles of the non-peddalling type. The leather top is beautifully moulded to shape and of extremely comfortable proportions.



The chief qualifications tires must possess are

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Service-giving qualities;—their ability to take you over all kinds of roads—through sand, mud, snow, over stones and slippery pavements.



are built with a view to meeting the requirements of the most exacting motorcyclist. Sixteen years' experience in the making of good tires has resulted in the production of a low-cost, durable, efficient tire that has been proven by many tests to have longer life, to require less attention and to be more adaptable to the severest conditions than any other motorcycle tire on the market today.

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A Pope Doing Double-Tandem Duty

The combined weight of the four men riding on the Pope Motorcycle shown in the above picture is 636 pounds. The motorcycle is owned by the Brown Music Company of Chicago, and the riders are employed by them in various capacities.

To carry four people, a motorcycle must not

only have strength enough to support their combined weights, but it must have plenty of reserve power to propel this enormous weight. That Pope Motorcycles are sufficiently strong and powerful to do this proves what we have often said concerning their wonderful durability and power in action.

A test such as this shows that for individual riding, the Pope may always be relied upon as a powerful thoroughly roadworthy machine, to go the route.

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We can furnish in any quantity steel rims for bicycles and motorcycles and in all the popular designs and sizes.

"Standard" rims are accurate to dimensions, excellent in workmanship and made of first-class material. They will not injure your tires as many rims do, nor will they easily collapse in collision.

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5,000 Miles on a Set of Empires



Ellis Rides 'Em on His Thor

JUNE 3, 1912.

EMPIRE TIRE CO.,
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Gentlemen:—

For the past two seasons my Thor 4 has been equipped with Empire Tires and Peerless red tubes. These tires have run in the neighborhood of 4,000 to 5,000 miles. Having been employed by the various repair shops in this city, I have had occasion to note the splendid service that Empire Tires have given to their users, especially where equipped with red Peerless tubes. In view of this, I feel that a few words in reference to this, would not be amiss.

Trusting that Empire Tires will have their continued good success as in the past, I beg to remain,

Yours respectfully,
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Specify Empires and Red INNER Tubes

Empire Tire Company

Factory: Trenton, N. J.

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"Don't be alarmed:
he has WEED
CHAINS too!"

Oh!

NECESSARY FOR THE MOTORCYCLE - AS THEY ARE NECESSARY FOR THE AUTOMOBILE

Necessity is the Mother of Successful Invention

THE insistent demand for a Motorcycle Anti-Skid Chain proved to us that it was a *necessity*. We have therefore produced **Weed Anti-Skid Chains for Motorcycles**—just as perfect in principle, construction and workmanship as **Weed Anti-Skid Chains for Automobiles**, which are so recognized as a tested, tried and time honored necessity that we are now *manufacturing and selling over forty miles of Weed Chains every day in the year.*

Weed Anti-Skid Motorcycle Chains

With the "Creeping Grip"

Give perfect traction, *prevent skidding and slipping.* Make motorcycling absolutely safe—sixty miles an hour—with perfect safety—make *all roads good roads.*

The continuous "creeping" prevents injury to the tires and keeps them clean, minimizing the chances of punctures.

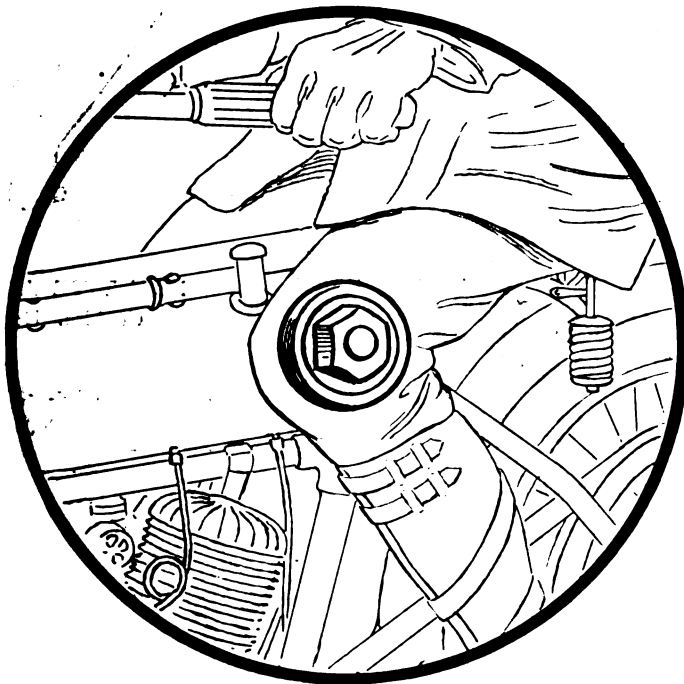
The secret process of hardening the cross chains, just adopted, gives extreme lasting qualities.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write us direct for full particulars.

Weed Chain Tire Grip Company, 28 Moore Street, New York

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SADDLE springs or any of these spring-seat-post arrangements simply turn your knees into shock absorbers. They keep the rider doing a continual jumping-jack stunt with his knees as the hinges. Riders of



don't get stiff and sore—there are no grouches. It's the only motorcycle with a Spring Frame and Spring Fork. This unique form of construction makes "The Flying Merkel" the "world's most comfortable motorcycle."

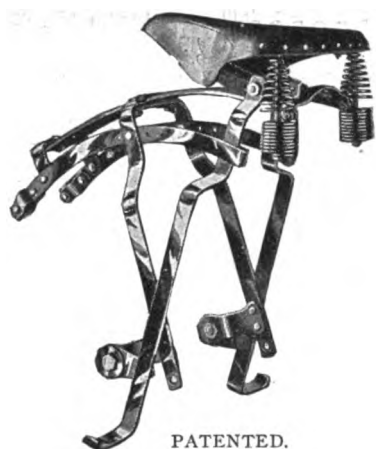
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SIMPLEX SPRING TANDEM
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Their Merits Have Won
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IMMEDIATE DELIVERIES



NEW TYPE A-K CARRIER
Cushion Detachable

Angsten-Koch Company

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The Motorcycle Manual

Is the *last word* on the subject of a publication giving comprehensively and in a handy form *all* the information required by a motorcycle rider or dealer. 104 pages, printed on coated paper.

Motorcycle engine and frame parts illustrated and fully described—their functions fully explained, with a remedy for every possible trouble

YOU NEED THIS BOOK

For it also tells you how to tour; gives the motorcycle laws of every state; official racing records, hill climbing, horsepower and other formulae, and a complete directory of the motorcycle trade. Pages are magazine size, 7x9 inches.

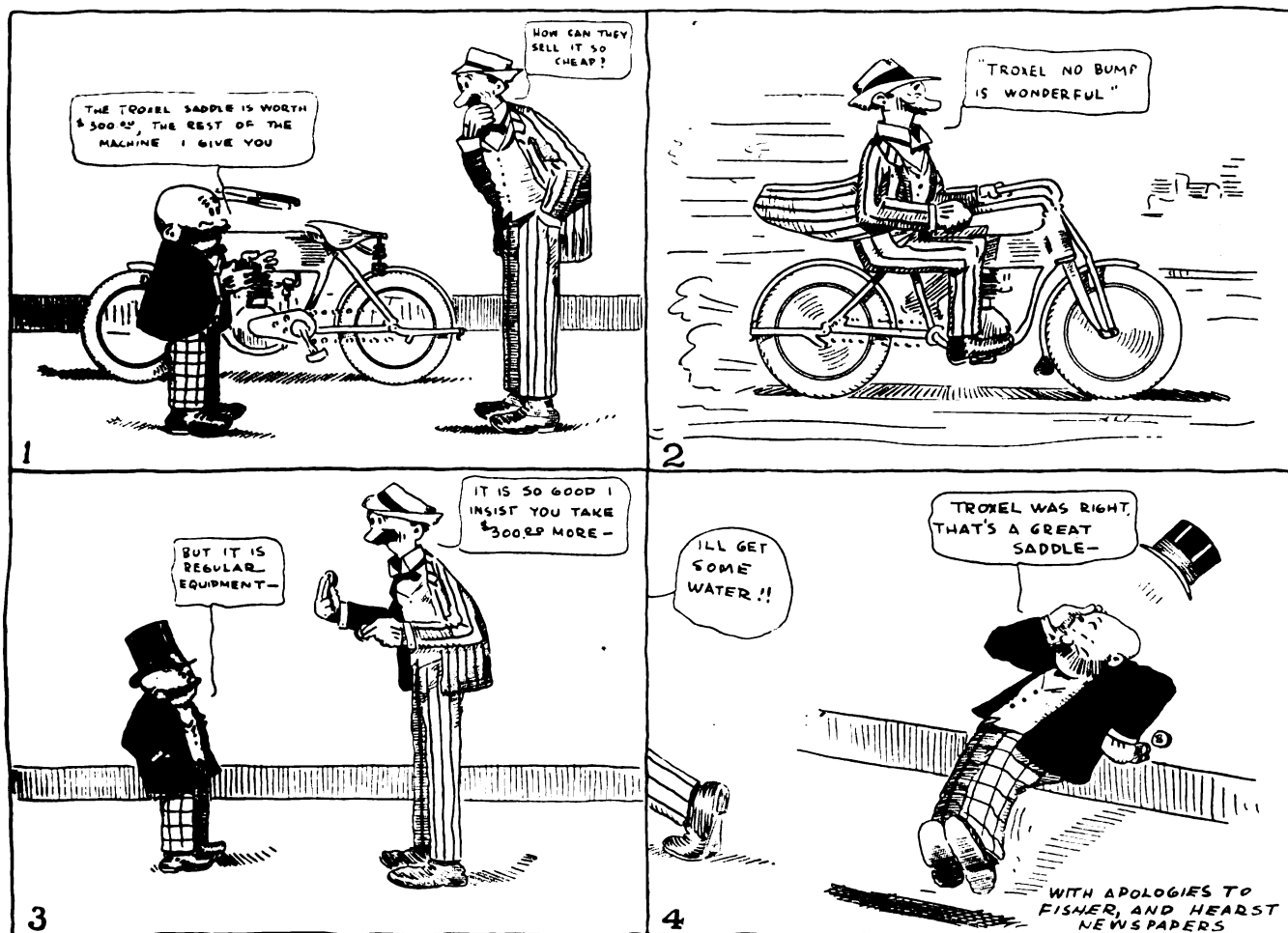
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Remember Troxel Saddles are regular equipment on every Motorcycle built, almost, and if you specify a Troxel "No Bump" Saddle you can have it for the asking.

"A TROXEL SADDLE WILL NOT HIT BOTTOM"

It is the only saddle built that rides easy and does not "BUMP." You ride on springs, "four of them," all the time.

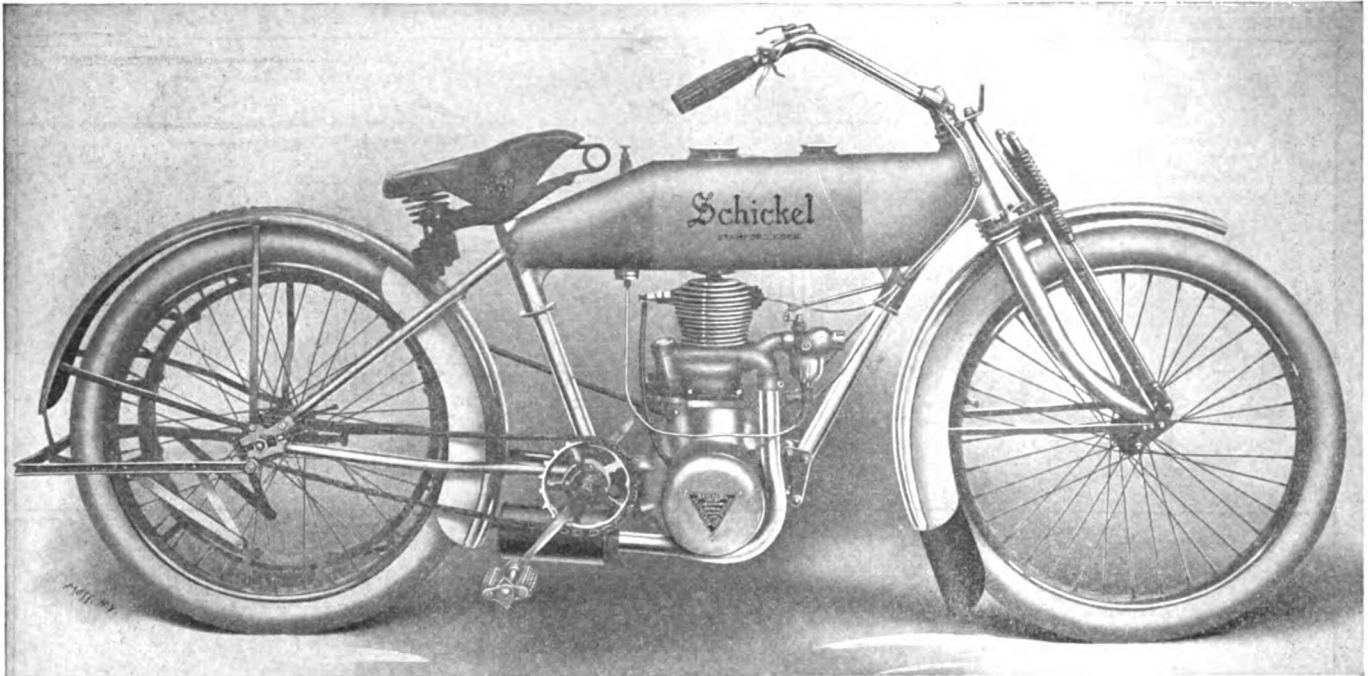
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The series of **Schickel** Feature Talks which
Have been running in this magazine have taken hold.
Every dealer the country over knows our

Many valuable talking points and
At once recognizes that the **Schickel**
Stands apart from all other

Twentieth Century motorcycles as the machine for
Every day service. **Schickel**
Reliability has been established in the

Minds of prospective buyers to the thousands.

Our proposition to the
Trade will link these buyers to your
Order book with little effort on your part.

Remember this—we have some good territory that
Can be secured now by the right man.

Your application will receive our best
Consideration. If you are interested

Let us hear from you at an

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THE SCHICKEL MOTOR CO., 59 Garden St., Stamford, Conn.

Distributor for Southern California: L. E. FRENCH, 16th and Hill Streets, Los Angeles

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Riding at the rear is dusty and uncomfortable

-but-

you get plenty of warning against rocks and bumps.

Al Merrick

A SEASONABLE SUGGESTION FOR MOTORCYCLISTS

Has your tire experience thus far this season been entirely satisfactory?

We hope it has been. Excessive tire trouble robs motorcycling of about one-half its pleasures. Besides, undependable tires are a constant drag on the pocketbook.

Therefore, we sincerely hope that no matter what brand of tires you have been using this season you have been getting service returns proportionate to your dollars and cents investment in tires. If you haven't been getting such results let us make a suggestion—

Try one or two Four-factory-tested United States Tires. Get the benefit of the extra strength, and the distinctive, all-around, service-yielding qualities built into these tires through our co-operative method of manufacture.

United States Tires are the product of four of the largest, most completely equipped and most expertly operated tire factories in the world.

They are not only four-factory-made but they are four-factory-tested, as well, giving the user a four-fold guarantee of quality and four-fold assurance that he will receive the long-lived road service he has a right to expect from his tires.

We believe that the extra strength we put into United States Tires through our exclusive methods of manufacture is all any motorcyclist needs to relieve him of unnecessary tire trouble.

Why not try them?

UNITED STATES TIRE COMPANY
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Dealers everywhere

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MOTORCYCLE ILLUSTRATED

51 CHAMBERS STREET,
NEW YORK CITY.PAID CIRCULATION THIS
ISSUE, 11,450 COPIES.

CONSTANT IS AMATEUR CHAMP

Brooklynite Sweeps Boards at Columbus, Piling Up Twenty-nine Points
Against Seventeen for Don Klark, His Closest Competitor—
Full Racing Returns.

HAVING rolled up a total of 29 points for the Bosch trophy, representative of the amateur championship at the F. A. M. national meet, John U. Constant, the Indian rider, of Brooklyn, N. Y., came into the limelight at Columbus and found himself the idol of race followers at the close of the four-meet convention program. Constant had a lead of 12 points over Don Klark, of Detroit, his nearest competitor. Klark managed to corral 17 points and thus took a substantial lead over E. R. Baker, of Indianapolis, who finished the program with nine points to his credit. "Shorty" Matthews had six points and Don Johns tied with him. Dan Willis and G. Evans figured in another tie, each having three points. Constant's 29 points were gathered out of a possible 37.

Each of the programs, which were staged on Thursday, Friday, Saturday and Sunday of the convention week, brought out a large crowd but not nearly as large as might have been attracted had the transportation facilities been up to the standard of the other arrangements. Visitors to the convention city experienced considerable trouble in reaching the motordrome by trolley and as a result motorcyclists who made the trip on their machines composed the bulk of the race following. There were finishes as tight as the wildest fan could hope for and plenty of sensational riding by the boys who were on the trail of the elusive championship points. Seymour showed well, as did Eddie Hasha, Klark, Graves, Willis and Evans and there was never a time when any speedster could count upon a runaway.

The official staff at the motordrome was made up as follows: Charles Fuller Gates, referee; A. H. Bartsch, of New York City, clerk of course; Robert Kirby, of Urbana, Ohio, assistant clerk of course; Paul J. C. Derkum, T. L. Morse, Howard French and H. G. Jacobs, starters for the four meets; Frank Flinn,

announcer; George W. Duncan, of St. Louis; Stanley Kellogg, of Bridgeport, Conn.; Charles H. Drude, of Detroit, Mich.; C. W. Hulse, of New Haven, Conn., and J. A. Turner, of Chicago, judges; J. A. Campbell, of Dayton, Ohio; T. J. Sullivan, of Chicago; W. M. Mathews, of Columbus; J. J. O'Connor, of New York City, and J. L. Donovan, of Chicago timers; G. J. Wagner, of Rochester, N. Y.; W. J. Surre, of Erie, Pa.; A. J. Lewis, of Alliance, Ohio, and J. Leo Sauer, of New York City, scorers; W. O. Law, of Troy, N. Y.; A. H. Harrop, of New Britain, Conn.; William Wood, of Baltimore, Md., and Thomas O. Wansleben, of Washington, D. C., umpires.

THURSDAY, July 18.—Ray Seymour struck his gait at the opening meet by carrying off first place in the 10-mile professional event with little difficulty. He was pressed by Eddie Hasha, the Texas speedster, for six miles but at that stage the Texan was retired by the bursting of his rear tire. Hasha managed to control his machine and avoid a spill, although he was clipping off about 80 miles per when the casing went bad. This event was one of the big features of the first day's racing.

About 4,000 people witnessed the races, most of them crowding into the infield in preference to occupying seats. Considerable interest was aroused in the 5-mile novice event, which was won by Charles Barker, of Attleboro, Mass., mounting an Indian, was in second place. John U. Constant, the amateur champ, featured in the 10-mile race for belt-driven machines, winning by more than a lap from Ray Snyder, of Columbus, his nearest competitor. Summaries:

Five miles, novice, stripped stock machines, 61.00 class—Won by Chas. Barker (Thor); second, B. M. Spencer (Indian); third, Chas. Dressell (Indian). Time, 4:42½.

Ten miles, F. A. M. amateur championship, 61.00 class; first heat, 3 miles—Won by E. W. Mathews (Thor); second, J. U. Constant (Indian); third, E. G. Baker (Indian). Time, 2:13¾.

Ten miles, F. A. M. amateur championship, 61.00 class; second heat, 3 miles—Won by Don Klark (Indian); second, Geo. Evans (Indian); third, Dan Willis (Indian). Time, 2:12¾.

Ten miles, professional, 61.00 class—Won by Ray Seymour (Indian); Eddie Hasha (Indian) out. Time, 6:49.

Five miles, F. A. M. amateur championship, 61.00 class; first heat, 3 miles—Won by E. W. Mathews (Thor); second, E. G. Baker (Indian); third, Dan Willis (Indian). Time, 2:13.

Five miles, F. A. M. amateur championship, 61.00 class; second heat, 3 miles—Won by J. U. Constant (Indian); second, Don Klark (Indian); third, Geo. Evans (Indian). Time, 2:06¾.

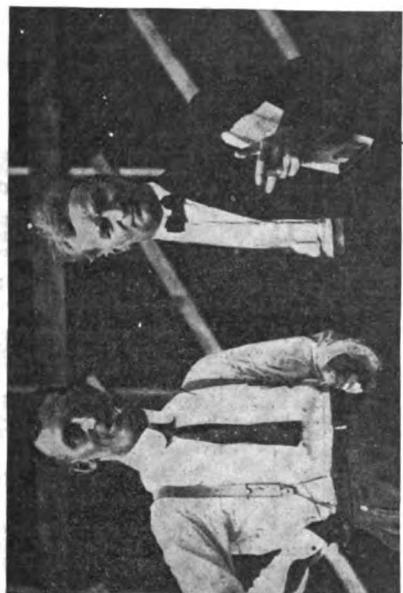
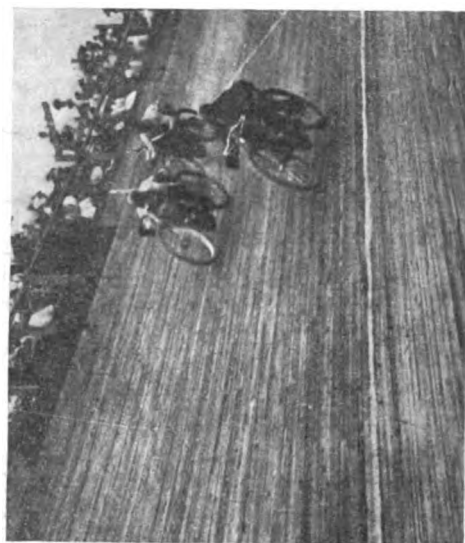
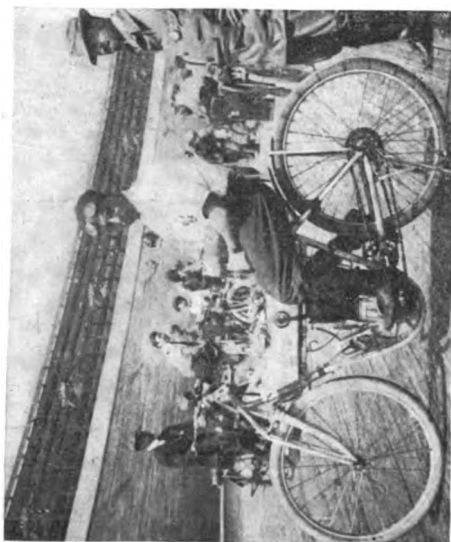
Ten miles, amateur, 61.00 class, restricted to belt-drive machines—Won by J. U. Constant (Indian); second, Ray Snyder (Emblem); third, Geo. Evans (Indian). Time, 8:57.

One mile, F. A. M. amateur championship, 61.00 class; first heat—Won by J. U. Constant (Indian); second, E. W. Mathews (Thor); third, Dan Willis (Indian). Time, 4:3¾.

One mile, F. A. M. amateur championship, 61.00 class; second heat—Won by Don Klark (Indian); second, Geo. Evans (Indian); third, Dan Willis (Indian). Time, 4:5¾.

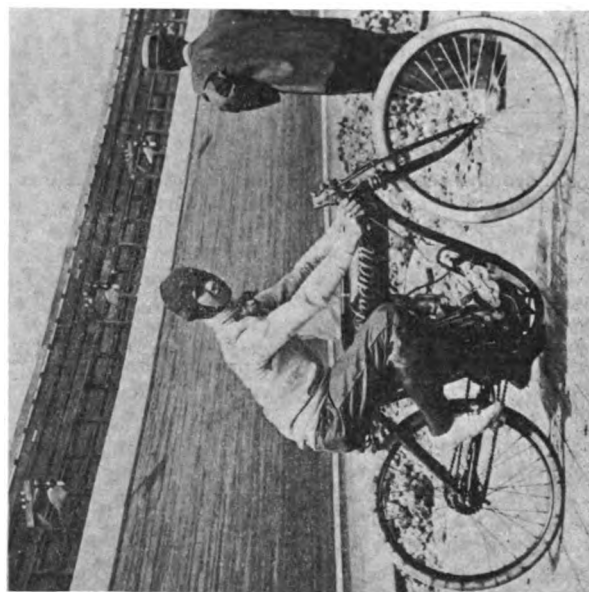
FRIDAY, July 19.—Eddie Hasha put up a pretty exhibition in the 10-mile pro event which was a feature of the Friday night races, and managed to lead the field home, although he was hard pressed by Graves and Seymour. They were at his rear wheel when the tape was reached, and the finish brought the 3,000 spectators to their feet cheering.

It was found that the machines entered in the 15-mile pro event were not equipped with tanks sufficiently large to hold a supply of gasoline that would carry them over the route, and this race was postponed. The 5-mile race for the M. M. A. amateur trophy was also postponed, as the riders could not get their machines ready in time. The 10-mile race for trade riders, 30.50 class, brought out five entrants who put up a pretty exhibition. They got away in fine shape at the gun, with Lon Clafin leading. At the second mile the riders began to string out with Tay-



AT THE COLUMBUS MOTORDROME.

Top photo—Manager Snyder and W. G. Schack. Bottom—Russell Cole, of Worcester, Mass. Left column—Marty Graves, Don Klark, Ray Seymour and S. S. Taylor. Right column—Ed. Hasha, "Shorty" Matthews. One of the starts.



lor trailing. The squad passed Taylor on the eighth lap.

Willis was leading at this point, with Clafin and Constant at his rear wheel. On the eighteenth lap Clafin succeeded in passing Willis, and Constant followed his example. The starter failed to give the flag for the last lap, and the speedsters, not knowing that the race was over, continued riding with Clafin leading, Constant at his shoulder and Klark a few yards in the rear. After the race the riders entered a protest because they were not given the signal at the opening of the last lap. The race was awarded to Clafin, with Constant second and Klark third.

In the 5-mile professional championship race Eddie Hasha broke one of his grip controls in the first mile and was retired. Seymour won.

One of the unique features at the Motor-drome was the method of announcing the race results. A Goodyear balloon floated over the enclosure, and an official seated in its basket made the announcements through a megaphone. Summaries:

Five miles, private owners, stripped stock machines, 30.50 class—Won by Earl Converse, Columbus (Thor); second, Noble Sheppard, Kokomo, Ind. (Merkel). Time, 5:29.

Five miles, professional, F. A. M. championship, 61.00 class—Won by Ray Seymour (Indian); second, M. H. Graves (Indian). Time, 3:22½. Hasha started but dropped out.

Ten miles, professional championship, 61.00 class—Won by Eddie Hasha (Indian); second, Raymond Seymour (Indian); third, M. H. Graves (Indian). Time, 6:40½.

Ten miles, trade riders, 30.50 class, open—Won by Lon Clafin (Indian); second, John U. Constant (Indian); third, Don Klark (Indian). Time, 8:14½.

Five miles, professional, open—Won by M. H. Graves (Indian); second, Ray Seymour (Indian); third, Dave Kennie (Thor). Time, 3:25½.

SATURDAY, July 20.—Johnnie Constant, the Brooklyn record-crimper, showed his rear tire to a classy squad of speedsters at the Saturday meet. In the 10-mile event for the F. A. M. amateur championship Constant, Matthews, Klark, Baker and Evans faced the starter. Constant shot into the lead and cut out a terrific clip. He was unable to shake the others, however, and the first five miles were covered in 3:29, with the Brooklynite and Klark neck and neck. Baker was lapped by the leaders. In the seventh mile Klark gained a slight lead over Constant, which he held until the ninth mile, when John U. slowly crept back into his former position.

At the drop of the flag for the last lap Constant caught up with Klark, and started to pass him. Then came a battle royal. The fans cheered like fiends as the Brooklyn boy flashed across the tape in the lead, with Klark hugging his rear wheel. Matthews was a good third, and Baker was 100 yards in the rear. Referee Gates announced that Klark had fouled Matthews and he disqualified the Detroit and gave second place to the Thor rider. Constant led again in the one-mile F. A. M. championship event, winning from Klark and Willis handily. Summaries:

Five-mile novice, 61.00 class, stripped stock machines—Won by Joe Miller, of Columbus (Indian); second, Chas. Dressell, of Columbus (Indian). Time, 4:26.

Ten miles, F. A. M. amateur championship, 61.00 class, open—Won by J. U. Constant (Indian); second, E. W. Matthews (Thor); third, E. G. Baker (Indian). Time, 6:59½. Don Klark finished second but was disqualified.

Fifteen miles, professional, open, 61.00 class—Won by Eddie Hasha; second, M. H. Graves. Time, 10:53½.

Final 5 miles, F. A. M. amateur championship, 61.00 class, open—Won by Don Klark (Indian); second, J. U. Constant (Indian); third, G. E. Evans (Indian). Time, 3:28½.

Ten miles, trade riders, 30.50 class, open—Won by J. U. Constant (Indian); second, Don Klark (Indian); third, Dan Willis (Indian). Time, 8:51½.

One mile, for F. A. M. amateur championship, 61.00 class, open; final heat—Won by J. U. Constant (In-

dian); second, Don Klark (Indian); third, Dan Willis. Time, 4:40½.

Five miles, M. M. A. Trophy event, 61.00 class—Won by J. A. Yates, of Columbus (Indian); second, H. D. Woolley, of Columbus (Indian); third, Joe Miller. Time, 4:06½.

SUNDAY, July 21.—The biggest crowd that turned out during the four-day program witnessed Sunday's races on the bowl. All the boys were on their mettle and the fans were treated to a series of snappy finishes interspersed with some hair-raising escapes from spills and neck and neck brushes between the leaders for the honors of the last day. Constant romped off with first place in the 10-mile event for trade riders in the 61 class, and Seymour took the 3-mile open professional race. Seymour also bested Graves in the 5-mile open professional event, and Eddie Hasha was high man in the one-mile professional time trials. Summaries:

Five miles, private owners—Woolley (Indian), first; Dressell (Indian), second; Yates (Indian), third. Time, 4:13½.

Ten miles, trade riders, 61.00 class—Constant (Indian), first; Evans (Indian), second; Klark (Indian), out. Time, 7:13.

Three miles, professional, open—Seymour (Indian), first; Graves (Indian), second; Hasha (Indian), third. Time, 1:56.

Ten miles, trade riders, belt-drive, 61.00 class—Snyder (Emblem), first; Evans (Indian), disqualified for riding on running board; Willis (Indian), disqualified for riding on running board. Time, 9:42½.

Five miles, professional, open—Seymour (Indian), first; Graves (Indian), second. Time, 3:26½.

Professional time trials, one mile—Hasha (Indian), 37½; Seymour (Indian), 37½; Graves (Indian), 38½; Balke (Indian), 38½.

Amateur time trials, one mile, 30.50 class—Constant (Indian), 50½; Taylor (Emblem), 58.

AT THE HENDEE WIGWAM.

THE Indian representatives in Columbus pitched their wigwam at the Virginia Hotel, the official F. A. M. headquarters. Among those who were on hand to welcome the boys were Vice-President Oscar Hedstrom, F. J. Weschler, Edward Buffum, Charles Gustafson, Charlie Spencer, Billy Teubner and Fred L. Hunt. The Indian boosters kept "open house" and welcomed all riders regardless of their tribe.

THE YALE HEADQUARTERS.

YALE riders in the convention city found a squad of genial representatives of the Consolidated Mfg. Co., holding forth in room 422, on the fourth floor of the Virginia Hotel. Every Yale dealer and rider who registered at the company's headquarters received a souvenir and an old-fashioned handshake, not to speak of satisfying refreshments.

PLENTY OF ACTIVITY.

THERE was no end of activity at the headquarters of the Motorcycle Manufacturers' Association, in the parlor on the fourth floor of the Virginia Hotel, and M. M. A. officials were kept on the jump throughout the week. It was here that the joint tour committee of the F. A. M. and the M. M. A. held forth and hundreds of riders and dealers called to pay their respects.

H-D FOLKS AT HARTMAN.

HARLEY-DAVIDSON dealers and riders made their headquarters at the Hartman Hotel during the convention. With a view to affording their squad all the comfort possible the Harley-Davidson folks obtained a special room rate at the Hartman, and the boys took advantage of it and at the same time made most of their opportunity to fraternize with H-D riders from all parts of the country.

SEVERAL Baltimore, Md., motorcyclists are planning tours to Nova Scotia, Newfoundland.

MUNRO WINS ROAD RACE

Harrison Police Captain Sets Fast Clip Over a 10-Mile Course Featured by Dangerous Turns.

HARRISON, N. Y., July 20.—Mounted on a 7-h. Indian twin, Andrew Munro, captain of police of this town and widely known as a daring rider, won the ten-mile road race today, the first of its kind to take place in eastern Westchester County. It was under the auspices of the Aranac Athletic Association, in connection with an outdoor fair. Although a novelty hereabouts, the motorcycle race helped to bring out a thousand spectators. Munro's time for the ten miles was 15:07.

The course was a very difficult one, having four bad turns, one of them a right angular one. It led the motorcyclists through beautiful Macy Park, an exclusive residential section, the winding drives of which were opened to the race, through the courtesy of the owners of the property. An oiled and level straightaway of half a mile was at the finish. The riders went four times around the circuit of two and a half miles.

Munro took the lead almost from the start and despite an accident when he ran into a private hedge, maintained the lead throughout the race. Narrow escapes were frequent where the riders had to turn the right-angular turn, which was bounded on the outside by a rail fence separating the highway from a declivity leading to the railroad tracks of the New Haven R. R. Spectators grouped about this turn held their breath as the machines skidded dangerously near the fence in turning.

William Ford, of White Plains, on an Excelsior 7 was second; R. C. Queen, of Tarrytown, on a similar machine was third, while Joseph Kapp, of Port Chester, on the only single cylinder in the race, 4-h. "R.S.," was fourth. Queen sustained a bad fall when Ford ran into him while rounding a curve, but the machine only received slight damage and the rider was up and away in short order. The winner received a silver cup while the others got gold, silver and bronze medals respectively.

NEW ROAD HOG SPECIES.

COFFEYVILLE, Kan., can undoubtedly lay claim to having the meanest road hog in existence. A few nights ago Fred Scothorn, secretary of the Coffeyville Motorcycle Club, and his wife were riding their two-wheeler near the city limits, and a man was driving just ahead of them. Looking around he saw the motorcyclists and pulled his horse toward the edge of the road. Scothorn started to pass, and when he had advanced far enough to have his front wheel even with the back wheel of the buggy, the road hog let his horse take the middle of the road again, sending Scothorn into the ditch. Fortunately neither he nor his wife were hurt, but the machine was damaged. The engine refused to run after the spill, so the motorist could not find out who the miscreant was. This is the second time that an incident of this nature has occurred near Coffeyville. The club has vowed vengeance if the road hogs are found out.

COFFEYVILLE, Kan., with a population of 12,689, has 46 motorcyclists and 226 auto owners. Over two-thirds of the motorcycle riders are factory men whose weekly pay is less than twenty dollars. All the riders claim that the upkeep of the single-tracker is less than carfare would amount to in going and coming from their work.

PATTERSON IS F. A. M. PRESIDENT

IN accordance with general expectations, Dr. B. J. Patterson, of Pratt, Kan., was elected last Friday afternoon by the National F. A. M. Assembly in Columbus to succeed G. H. Hamilton as president of the Federation. Although it required two ballots to determine the contest, the Kansas candidate won by a comfortable vote over J. Leo Sauer, of New York, and Dr. Clint La Salle, of Rochester. The election was a spirited one, and fully enjoyed by all of the eighty-one delegates who participated.

At the morning session, among other constitutional amendments, the Assembly had adopted one providing that it require a majority vote to elect a national official. There being eighty-one delegates present, when nominations for the presidency were called for, President Hamilton announced that it would require forty-one votes to elect. The first ballot stood: Patterson, 36; Sauer, 28; La Salle, 17; on the second and final ballot Patterson received 42 votes, one more than a majority; Sauer 29, and La Salle 10.

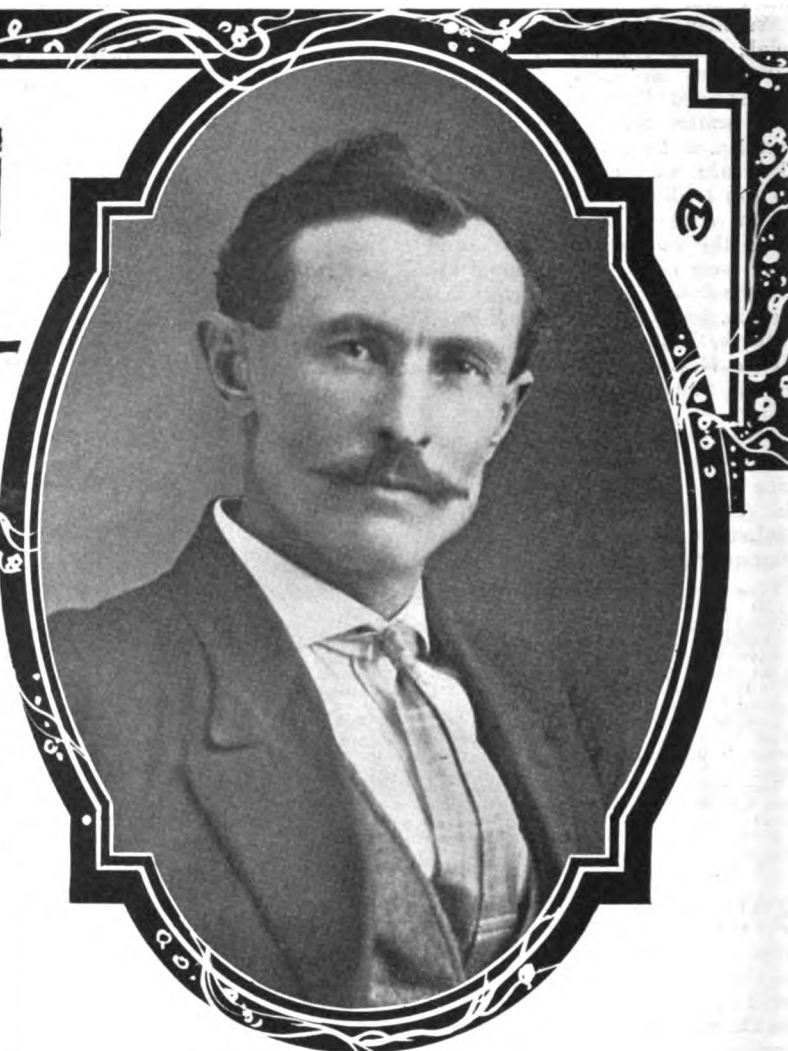
Mr. Sauer was placed in nomination by Eph Ball, of Norfolk, Va., his nomination being seconded by Fred I. Willis, of Indianapolis. Dr. Patterson's nominator was P. N. Bushnell, of Aberdeen, So. Dak., and the nomination was seconded by Charles Fuller Gates, of Los Angeles. Dr. La Salle who, owing to the serious illness of his wife, was unable to be present, was placed in nomination by G. J. Wagner, treasurer of the Rochester club.

When the nominations were closed and before the first ballot was taken, Mr. Sauer arose to explain that he had never been a candidate for the office and from the start had made it very plain that he was not seeking the honor. He explained that it would be impossible for him to give the office the attention it deserved, and that those who voted for him would do so at the risk of having the presidency in the hands of one who could not devote sufficient time to the duties of the office. He stated, furthermore, that it was his belief that, inasmuch as the East had been well represented since the start, the West should now have a chief executive of the Federation.

Upon motion made by Sauer, the election of Dr. Patterson was declared unanimous. The Kansan was plainly pleased with his selection by the Assembly and, in response to urgent calls for an address, made an excellent

The New President

Dr. Patterson is the first F. A. M. chief executive to hail from a State west of the Mississippi. His election will undoubtedly give impetus to the Federation movement in the Far West, while the East may be depended upon to give its heartiest support to his administration.



impression. He thanked the delegates and, among other things, stated that he endorsed the policies of Dr. Thornley as chairman of the Competition Committee, and that he would reappoint the Doctor to his present office. As the reappointment of Thornley was regarded as even a bigger question than the presidency, Dr. Patterson's announcement that Thornley was his choice brought forth enthusiastic cheers.

E. M. Estabrook, of Bangor, Me., chairman of the Committee on Membership, was unanimously elected a director to succeed himself. When nominations for a director to succeed Winfield Graham were called for, Dr. Thornley named William N. Johnson, of Chicago, owner of the Riverview Motordrome. In explanation of his nomination, Dr. Thornley stated that inasmuch as board track racing had reached such proportions in the United States, it was only fair and wise that the board track owners should have a representative in the F. A. M. Board of Directors. Johnson was elected, though by only a few votes, over A. B. Coffman, president of the Motorcycle Manufacturers' Association. Paul Derkum, of Newark, N. J., and C. E. Barr, of Columbus, were the only other nominees.

Dr. G. B. Gibson, of Westboro, Mass., was unanimously elected secretary-treasurer, Mr. Fred I. Willis being instructed to cast the unanimous vote of the Assembly for the Westboro man. When called upon for a speech, Dr. Gibson expressed himself in two short sentences, as follows: "Gentlemen, as in the past, so in the future. I thank you."

At the beginning of the business session Friday morning, Mr. A. B. Coffman, president of the Motorcycle Manufacturers' Association, presented to the F. A. M., in behalf of the M. M. A., a beautiful silver trophy cup sixteen inches in height, to be competed for each year in a five-mile amateur, stock event at the national meet. The cup must be won three times in succession by one rider before it becomes his personal property. The cup was received with a vote of thanks.

Several reports of officers were read and adopted. The first was that of Chairman Estabrook, of the membership committee; the next that of Chairman Thornley, of the competition committee, followed by the report of J. Leo Sauer, chairman of the legal action committee, and F. I. Willis, chairman of the press committee. Synopses of these reports follow:

Vice-President La Salle, of the Atlantic District, sent in an exhaustive report, with many excellent recommendations. Dr. Patterson, vice-president of the Central District, rendered an oral report, as the detailed written report which he had prepared was left at home by accident. However, Dr. Patterson told of the great growth of interest in the sport in the West, and explained at length the details of the annual trip which the Short Grass Motorcycle Club is soon to take, he invited fifty more members of the F. A. M. to join. The report of A. W. Green, vice-president of the Southwestern District, was adopted, as was also that of E. L. Moore, vice-president of the Pacific District.

Several communications were read to the Assembly. Toledo, Ohio, and San Francisco, Cal., put in bids for the 1913 convention. A letter was read from the Auto Cycle Union of England, stating that the Union was in favor of forming an international motorcycle federation, and of forming an alliance with the F. A. M. as soon as possible. The letter met with much favor. The convention took a noon recess.

There was plenty of activity at the Saturday morning session of the delegates, and the matters demanding attention were discussed in a spirit which betokened a healthy interest in the affairs of the Federation. Several propositions were thoroughly threshed out, among them an amendment offered by J. A. Hall, of New York, which proposed that the F. A. M. transact its business at an annual session to be held alternately at the New York and Chicago shows. It was not the intention to abolish the annual summer meeting, but to devote it entirely to tours, racing and a general entertainment program. Mr. Hall argued that the business and social features should be separate, on the ground that delegates could not be expected to give proper attention to business details when entertainment inducements were being held out to them on all sides. The amendment was voted down, however, many of the delegates explaining that it would be impossible for them to take two vacations each year to attend the separate business and entertainment sessions.

Several of the speakers arguing along this line stated that with such an arrangement as the amendment proposed the business session in the winter would be handled entirely by trade interests, as trade representatives would be the only ones in a position to make the trip to New York or the Windy City. Objections were raised to this line of argument, but it was not denied that delegates in general would be seriously inconvenienced by the proposed rearrangement. Attention was also called to the fact that the delegates were displaying plenty of interest in the business sessions at Columbus despite the fact that there were many entertainment features to attract them. In this connection it is worthy of note that as many as 100 delegates were on the convention floor during most of the business sessions, a better showing than has ever been made in the past.

It was at the Friday afternoon session that the batch of amendments given above were adopted, and at the same time the following resolutions against tank-riding, speeding and other abuses of the single-tracker were passed upon:

Whereas, The Federation of American Motorcyclists believes in the use and not in the abuse of motorcycles; and

Whereas, One of the chief purposes of the Federation is to promote the best interests of motorcyclists and motorcycling; and

Whereas, The practice of "tank-riding," or carrying two passengers on a one-passenger motorcycle; the unreasonable and unnecessary use of the open muffler, and reckless and fast riding on streets, thoroughfares and roads in defiance of law and the rights of others are harmful and prejudicial to the best interests of all motorcyclists; therefore be it

Resolved, That the Federation of American Motorcyclists, in annual convention assembled, does hereby declare its opposition to the so-called "tank-riding," speeding and the open muffler, and does now call on each and all of its individual members and its affiliated clubs

to lend their active aid and influence in stamping out these evils; and be it further

Resolved, That the Federation of American Motorcyclists does now pledge itself to fight these abuses to the end, in order that the thoughtless acts of irresponsible riders shall no longer create public prejudice against law-abiding motorcyclists, and that motorcycling shall be known for what it truly is, a health-giving, comfortable and pleasurable recreation, a necessity in the quick dispatch of modern business and the king of sports.

THE NEW PRESIDENT.

"CONGRATULATIONS! All Kansas is proud of Pat, our new president."

The above telegram reached the F. A. M. convention at Columbus early Saturday morning. It was sent by P. E. Zimmerman, in behalf of Dr. Patterson's great following in Kansas.

Dr. Patterson brought a number of his followers and supporters to the Columbus convention; or, rather, the Patterson supporters just followed their candidate to Columbus to see that he was elected.

General approval of Dr. Patterson is expressed by those who know him intimately. He is described as a man who carries out his plans. The fact that he is plain-spoken and courageous was brought out at the convention.

The new president, in his final word to the Columbus convention said: "I want to see 30,000 members in the F. A. M. next year and I believe we can get them."

The election of Dr. Patterson may be traced back to the work of his wife, who was the originator of his "boom" and his campaign manager. "My work is done," said Mrs. Patterson. "I know that Dr. Patterson will make a good president and I am overjoyed to have the F. A. M. elect him, for I know they have not made a mistake. I am one of the proudest women in the United States today, and I am going to quit politics for good now, before I spoil my record."

Dr. Patterson has his "hobbies." He plays a cornet and is the leader of a band of forty pieces in his home city. Eph. Ball, the well-known Virginian delegate, "dared" Dr. Patterson to lead the band at the Columbus national race meet, and "Pat" answered: "Tell the band to play something decent—say, 'Poet and Peasant' or 'William Tell,' and I will lead them. But I don't care for the 'ragtime' stuff."

VICE-PRESIDENT LA SALLE'S REPORT.

This district held a meeting in Rochester, N. Y., August 19, 1911, at which Arthur Stroble, of Rochester, was elected district secretary, and R. S. Morton vice-chairman of the district. At that meeting the Atlantic District went on record against tank riding and in favor of State legislation prohibiting the practice, and also in favor of a State law making uniform regulation of the use of motorcycles in the State, thus eliminating the petty exactions of the smaller towns, as is now the case. This legislation was attempted by the writer, but for reasons later given no such law is yet on the books.

The annual meeting was held at Elmira, N. Y., July 4, at which Arthur Stroble was unanimously nominated for the vice-presidency of the Atlantic District for the coming year, the writer declining to serve another year. Many matters looking to the betterment of the F. A. M., increase in efficiency, giving the members more for their dollar, and means for keeping their membership and interest, after they are once in, were discussed. All of which points will be covered in the recommendations which follow.

The writer feels that he has been singularly fortunate in the officers that he selected to aid him in the past year's work. Vice-Chairman Morton, who has also acted as New York State Commissioner, has been at all times and places cheerfully ready to put his shoulder to the wheel, both in State and district affairs, and has been a most helpful and efficient officer.

E. B. Connell, Pennsylvania Commissioner, who was State Secretary last year, has used his previous experience to splendid advantage. He has worked hard and unceasingly, and after a short observance

of the way Mr. Connell took hold, we felt that Pennsylvania could take care of itself, a view which has been justified by the well-nigh perfect State organization Connell has built up.

W. T. Reed, appointed New Jersey Commissioner, vice Anderson, is a comparative newcomer in the motorcycle game, and feeling his inexperience at this line of work he has gone carefully at his task. He has applied the practical methods acquired through a long and successful business career, and his work up to date has been effective and complete.

That Maryland has been in good hands is shown by the activity apparent in Baltimore, wherein is the major portion of the motorcyclists of the State. Woods' previous work as Maryland Commissioner fitted him admirably for the continuance of the office under our administration.

In organizing and getting into motion the new Atlantic District, we were at once put to it to secure State Commissioners. None were appointed without their ability to handle the office in a businesslike, thorough way being established. We have not been able to secure commissioners for West Virginia and Delaware at all. Virginia lingered for a time, but the delay has been justified by the splendid work of E. B. Ewell.

Just a word of comment on the work of our Secretary-Treasurer. One who has not had the enlightening experience of being secretary to smaller organizations than our National body, as has the writer on several occasions, can not appreciate what it means to keep the work of the Secretary-Treasurer's office of the F. A. M. up to the minute. True, the present incumbent receives an amount sufficient to make it no falsehood when we say, "He's paid"; still the recompense he receives compares poorly with the amount similar labor and responsibility would command in the world of business. Dr. Gibson is deserving of recognition of his enthusiastic service by as much of an advance in emolument as we can afford to render.

A national officer, who is in position to speak with authority, has said that the Atlantic District is the best organized in the country. This might be considered provocation for us to get chesty—but it isn't. What the gentleman meant was that the district committees were filled and that the State commissioners were doing their work in getting local commissioners. It is a fact that most of the Atlantic District States show a fairly good list of officers, but the real test of the effectiveness of our, or any other district's work, in fact the work of the entire F. A. M., lies farther afield.

During the past year the ubiquitous "What do I get for my dollar?" has stuck its unlovely phiz into our sanctum so often that we made up our mind there must be a reason for the persistent life of the query. Conscientious study has convinced us that there is reason for it.

The proper question should be: Are we giving our members all they are entitled to? Are we seeing to it that the motorcyclists of the country enjoy all the safeguards that surround the users of other utilities of transportation, which are theirs by right? Are we as well prepared to resist encroachment upon our constitutional rights as the users of the auto, for example? If one of our members wishes to tour from Baltimore to "Frisco" via New York and Buffalo, can we give him a map and road dope covering the main trunk route through the Atlantic District, and sell him at cost the same books covering the other districts he will pass through? And do the books mentioned contain registered F. A. M. hotels wherein he may get good service, courteous treatment and reasonable rates? Along with the list of registered repair shops, F. A. M. clubs, does the book list an F. A. M. attorney in each large town who may be depended upon to take care of the rider's interests in case of local prosecution—or persecution, as is sometimes the case? And in case of a successful defense is the rider sure of being charged a moderate fee?

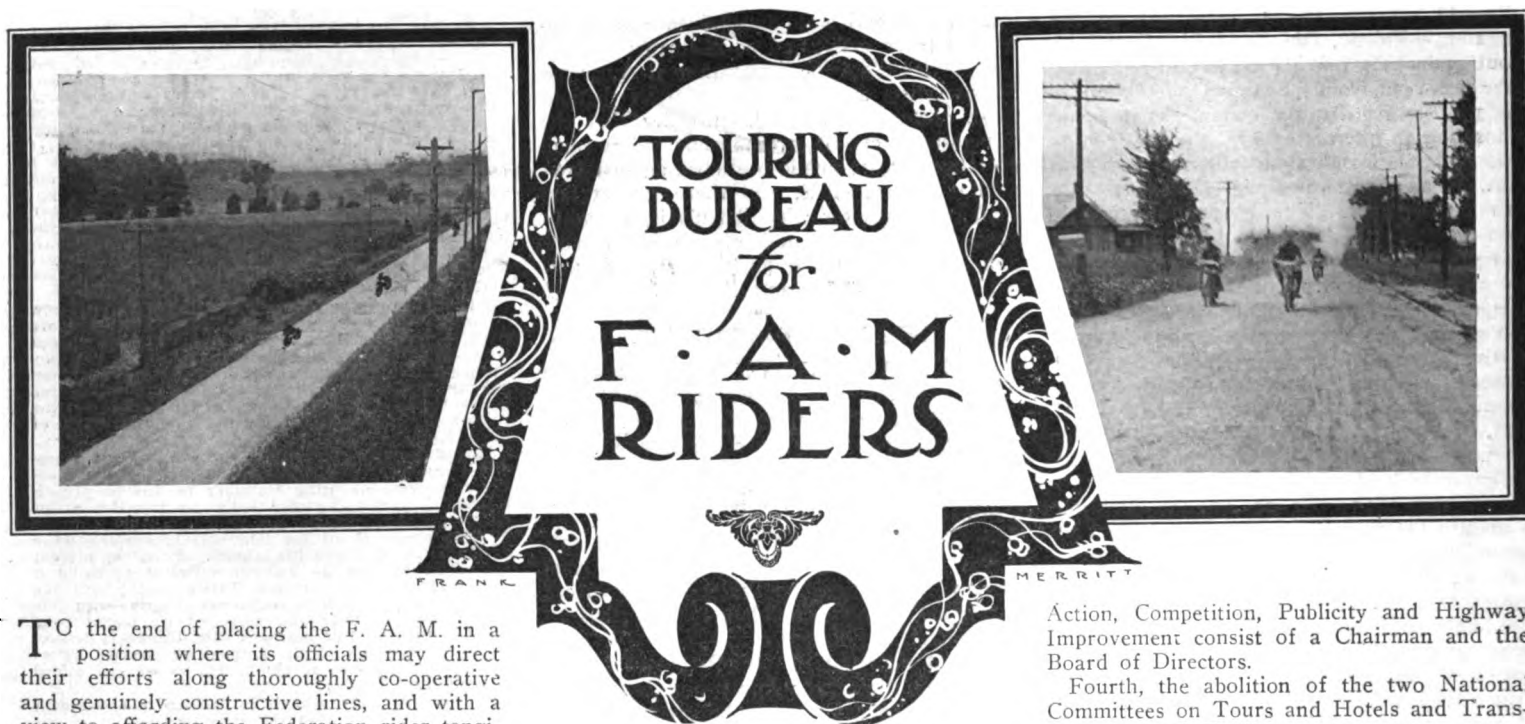
These things are all in the scope of the avowed purposes of the F. A. M., and if the organization does not give all of them to its members it does not live up to its avowed intent and purpose, and there is reason for the question anent the dollar.

It is not, however, "How much can we give for a dollar?" The public will buy when it knows it gets value for value and it is plainly up to us to determine what we shall list in our stock so that the proposition will not be "Why don't you join?" but, "How can you afford to stay out?" Further, let us stock up with the right goods, find what it is worth to give real value, and then charge accordingly. No business of consequence today can run successfully for long unless it be run on the basis of cost. Do we know what it costs us to make a member? Can we tell within a few cents what renewals cost us?

Taking our questions seriatim, let us see where we stand. Before going further, we wish to state that all this matter was thoroughly considered at the beginning of our administration, and portions of the plan outlined would have been attempted, except that it was more than a one-man job.

As to legal safeguards: In New York conditions are such that different townships may pass restrictive legislation that hampers our riders going from town to town. In order to correct this condition, we requested R. Douglass Boyd, Fulton County Commissioner, and member of the New York State Committee, to draft a bill covering this and other points, which he did, making a very good bill. This we forwarded to the National Law Committee Chairman with the request that he make such corrections as he deemed advisable and see to its early introduction into the State Legislature. He examined the bill and

(Continued on page 55.)



TO the end of placing the F. A. M. in a position where its officials may direct their efforts along thoroughly co-operative and genuinely constructive lines, and with a view to affording the Federation rider tangible returns for his membership, a number of broad amendments to the Constitution and By-Laws were submitted at the Columbus Assembly and adopted without opposition. Of chief importance is the amendment providing for the abolition of the existing system of districts and district vice-presidencies, the aim being to offset the present unwieldiness of the governmental units through the perfecting of compact and well-directed State organizations. That the solution of the problem which has given leading spirits in the F. A. M. food for serious thought of late lies in this direction was the practically unanimous opinion at Columbus, and the amendment paving the way for the revision was promptly approved. This provision carries with it a clause permitting the President, with the consent of the Board of Directors, to remove any State Commissioner who proves his unfitness for the office by laxity in the performance of his duties.

Of almost equal importance, and certainly of more direct interest to the average rider, is another amendment calling for the organization of a National Touring Bureau of the F. A. M. This bureau will be substituted for two national committees, on Tours and Hotels and Transportation and Facilities, these committees being abolished under the amendment. It is the intention to have the bureau directed by a salaried man to be appointed by the President with the approval of the Board of Directors. The tour official will be called upon to obtain and file all available data with reference to routes and road conditions throughout the country in order that he may be in a position to answer any reasonable query from an F. A. M. member who is preparing to make a tour. As the bureau develops an effort will be made to supply maps for all tourable districts and to give motorcyclists many of the advantages now afforded automobilists through their national organizations. That this is one of the most important steps so far taken by the Federation, from the viewpoint of riders in general, goes without saying, and the officials look forward to making the National Touring Bureau a potent factor in the upbuilding of the F. A. M. of the future.

A radical change is provided for in the committee system by another amendment, which states that the committees on Membership, Legal Action, Competition, Publicity and Highway Improvement shall consist of a chairman and the members of the Federation Board of Directors. With this arrangement the Directors cannot fail to be closely in touch with the work of each committee, responsibility will be centralized and the several chairmen will of necessity put forth their best efforts for the advancement of their departments. The resolutions embodying the amendments were adopted in full as follows:

Whereas, under its present system of government, the Federation of American Motorcyclists is not in position to make the most of its opportunities; and

Whereas, We have been handicapped by the absence of continuity and by a lack of co-ordination of the different units of our government, because parts of our Constitution and By-Laws are not properly adopted to satisfy the requirement of an organization of this character in a country of this size; and

Whereas, It is the sentiment of this Assembly that the future should witness the accomplishment of more genuinely constructive work for the direct benefit of our entire membership; therefore be it

Resolved, That this Assembly so amend the Constitution and By-Laws of the Federation of American Motorcyclists as to incorporate the following changes and additions:

First, the abolition of the District System and the District Vice-Presidencies.

Second, an exact definition of the duties of the State Commissioners, including the appointment of local commissioners, and the rendition of monthly reports to the National Secretary concerning all matters affecting motorcyclists in their respective territories, together with the proviso that it shall be the privilege and the duty of the President to remove from office, with the consent of the Board of Directors, any State Commissioner who has shown lack of ability or inclination to do his work.

Third, so changing the committee system as to have the Committees on Membership, Legal

Action, Competition, Publicity and Highway Improvement consist of a Chairman and the Board of Directors.

Fourth, the abolition of the two National Committees on Tours and Hotels and Transportation and Facilities.

Fifth, the organization, in place of these two committees, of a National Touring Bureau, to be in charge of a salaried man, to be appointed and to be removable by the President with the approval of the Board of Directors.

Sixth, a provision that in the event of a vacancy occurring in any elective office, it shall be filled by a two-thirds vote of the entire Board of Directors.

Seventh, that it shall require a majority vote, at any Assembly, of the delegates present to elect any national official except Directors, in the selection of whom a plurality vote shall be sufficient.

Eighth, that upon petition of three or more directors any act of any F. A. M. national official shall be called up for approval or nullification by a majority vote of the Board of Directors; and

Be it further resolved, That these amendments go into effect immediately; that a committee of two be appointed by the President to write said amendments into our Constitution and By-Laws; that said committee is hereby authorized and instructed to have a copy of the so revised Constitution in the hands of the National Secretary within ten days after the adjournment of this Assembly, and that the exact language of the changes and additions be given out for publication in the trade press as soon thereafter as possible.

ESTABROOK'S REPORT.

I HEREWITH submit my annual report: The work of this office is so closely associated with that of the National Secretary and the results of its efforts, in a membership way, are so intermingled with the work of our secretary and other good workers, that it would seem meet that the secretaries' report should cover the joint efforts of all workers in common.

Manufacturers of motorcycles and accessories, jobbers of motorcycle and bicycle sundries, motorcycle and bicycle dealers, together with repairers, have co-operated with this office in an efficient and friendly manner, in the dissemination of the gospel of the F. A. M.; and it is safe to assert that

the Federation has been well advertised.

The work of club organization throughout the country has been steadily advanced and also carried to a successful termination in the Canal Zone and the Philippine Islands, while prospective work has been done in other remote quarters. Several hundred dollars' worth of Old Sol lamps have been distributed among our clubs as prizes for building up their membership, and more are in prospect.

Considerable work has been done in the interests of membership by establishing recruiting stations throughout the country, and it may be interesting to note that we have a station in Culebra, Panama, and one in Edinburgh, Scotland.

Considerable laborious work in the interest of better State and local organization has been directed from this office with but indifferent results, due to adverse conditions existing locally.

SECRETARY'S REPORT.

HEALTHY gains in all departments of the F. A. M. are set forth in the report of Secretary Gibson with reference to the growth of the organization for the fiscal year just closed. The national secretary submitted the following statement:

It is very gratifying to be able to show such a healthy growth in our organization during the past year, and to feel that we have now reached a strength that is causing us to be recognized as a power in the motor world. I confidently expect that within five years, we will have reached the membership and recognition formerly enjoyed by the grand old (L. A. W.) League of American Wheelmen, which organization's logical successor we are. I might incidentally state that we hold membership card No. 775 in the L. A. W., joining in old high wheel ordinary days, and still keep up our membership like many of the old members, for sentiment, if nothing else.

I wish to state that the vital records of the F. A. M. are kept in a good safe, which is now full almost to capacity; the vital membership records are kept in duplicate, one set in concise form in our safe; we are protected by a \$1,500.00 fire insurance policy; we keep tabulated, in arranged forms, data regarding the various departments of our work, and are able in a few moments to obtain any data we may be called upon to furnish.

We have outgrown our present quarters and must seek another location for our increasing work; with four stenographers, an office boy, five typewriters, two roll-top desks, four typewriter desks, a safe, two writing tables, six large three-section filing cabinets, a stock room, and a cabinet for odds and ends, papers and reports, you will at once obtain some idea of our office equipment and needs.

The total enrollment of the Federation on July 9, 1911, was 9,664, and on July 1, 1912, it had jumped to 16,250, a gain of 6,586. The fully paid up membership on July 9, 1911, was 7,296, and on July 1 of the current year it was 11,929, divided as follows: Affiliated riders, 9,077; unaffiliated, 2,852. The records show that on July 9 of last year 168 clubs had been affiliated, and on July 1 of the current year the F. A. M. clubs numbered 291, a gain of 123. The registered repair shop list also shows a marked gain, no less than 356 establishments having been brought under the Federation banner in the last fiscal year. On July 1 last the Secretary's records showed that 678 shops were on the registered list.

LEGAL ACTION.

Chairman J. Leo Sauer, of the National Committee on Legal Action, briefly reviewed the work of his committee and expressed his intention to introduce resolutions looking to several important changes and extensions, his report being substantially as follows:

As a result of action taken by this committee, a bill prohibiting motorcycle racing in the State of New York was defeated, as was also a measure in New York City, the object of which was to impose unfair regulations upon the owners of motorcycle garages.

Action is pending in a number of cases, the most important among these being as follows:

Against an ordinance in Lockport, N. Y., which would prohibit tandem riding in that city; in connection with the arrest of endurance riders in Bakersfield, Cal.; relative to the passage in Alabama of a law imposing an annual license fee of \$100 on motorcycle dealers; to the end of reducing some of the motorcycle toll rates in the State of Pennsylvania; also ferry charges between San Francisco and Oakland.

For a number of reasons the work of this committee has not been at all satisfactory to its chairman. He is perfectly willing to assume his share of the responsibility, though much of the difficulty lies at the very roots of the organization. However, the object of this report is simply to state what has been done, and not give reasons or excuses for your chairman's failures to do certain other things.

Aside from my duties as chairman of this committee, I have been delegated by your President to undertake several missions of more or less importance, concerning which the following report may be of interest:

(1) Last fall I went to Toronto, Canada, in order to ascertain the sentiment of Canadian riders toward the F. A. M. Although I found the Toronto and other Canadian clubs to be very friendly to our organization, I soon learned that there was very little prospect of their joining the Federation as a Canadian District. As a matter of fact, as I predicted at the 1911 Assembly, the Canadian District has never existed except on paper. Accordingly, I endeavored to make it very plain to our Canadian friends that our organization was not seeking to control the situation there, but simply to insure, among other things, reciprocal competitive relations. Since my visit to Toronto a separate Canadian organization has been formed, and I therefore recommend the abolition of the so-called Canadian District of the F. A. M., and also the adoption of a resolution inviting the Canadian Association to enter into a close alliance with our Federation.

(2) Your President instructed me to investigate the matter of providing up-to-date touring maps for F. A. M. members. I have given this question exhaustive study, and have come to the conclusion that, instead of using the maps of some automobile association, we should at once establish a touring bureau of our own, this bureau to replace our present inactive national committees on highway improvement, tours and hotels, and transportation and facilities.

(3) The writer is a member of a committee instructed by your President to report with reference to the adoption of an F. A. M. uniform. This matter was taken up with Mr. A. B. Coffman, who will report his findings to the Assembly.

(4) The writer was authorized to prepare a draft of a contract for exclusive board track franchises and also to arrange for the auditing of the books of the chairman of the Competition Committee. Both of these matters have been attended to.

Referring directly to the work and also the failures of the Legal Action Committee, the fact should be emphasized that this committee has never enjoyed proper co-operation, without which very little is possible. For example, in four out of five cases of adverse legislation, this committee has been advised after instead of before the enactment of objectionable laws. In some cases the information has come from a State Commissioner, but not always. Now it is a fact that it is easier to defeat legislation before its passage than after.

That is why we have been successful in New York State, where we learned of the prospect of the adoption of legislation while it was still in the hands of a committee. The undersigned has received at least one criticism, anent our activity in New York State at the apparent expense of other parts of the country. Such criticism would be justified were it not for the fact that the chairman of this committee had to depend upon others for information from other States, which information was forthcoming very rarely.

The chairman has found it necessary to decline to take up personal damage suits owing to lack of facilities and lack of funds. It is to be trusted, however, that in time special arrangements may be made with a view to this committee's assisting in particularly distressing cases.

In this connection, aid could be rendered by this committee in at least a few personal damage suits

each year, if it was certain that the income from exclusive board track franchise fees is to be permanent. Under the resolutions adopted by the Board of Directors early this year, the first \$1,000 was to be set aside each year for the uses of the National Committee on Legal Action. As a matter of fact, \$1,000 was set aside this year, but as there is no way of knowing how much, if anything, will be available in future years, the committee cannot very well plan far ahead.

Legal action is always expensive, as compared with the average grades of other work. Experience has demonstrated that a poor lawyer is worse than none at all, while a good one comes high. As the chairman of this committee does not profess to be a lawyer, he has found it necessary in cases of doubt to consult men who make the law their profession. One thousand or \$1,500 will not go very far in buying legal advice, and the writer believes that in due time, though not this year, it will be wise to pay a good lawyer to take charge of the National Committee on Legal Action and, perhaps, charge larger membership fees for special benefits in the way of legal protection, insurance, etc. I am of the opinion, however, that at the present time we should concentrate our efforts to the end of building up a first-class touring bureau, which I believe to be entirely practical and detailed plans for which I intend to place before this Assembly this week.

My one year's chairmanship of the National Committee on Legal Action has convinced me that our present system of organization is much at fault for the failure of most of the national committees to do constructive work. I recommend radical changes, notably the placing of more responsibility upon the shoulders of State Commissioners.

FINE PUBLICITY

Obtained Along the Routes by F. A. M. Tour-Masters.

INTERVIEWS like the one below appeared in many a newspaper last week, thanks to the foresight of Guernsey Van Riper, who is in charge of the F. A. M. Publicity Bureau and who supplied the various tour-masters with some clever made-to-order "dope":

"We're on our way to Columbus, O., to attend the 1912 convention and meet of the Federation of American Motorcyclists, and if we have one-half as good a time at Columbus as we are having on the road it will be a record-breaking meet," said J. A. Campbell, of Dayton, the tour-master.

"Columbus will entertain the F. A. M. for five days, beginning Wednesday, July 17, and Columbus has promised visiting motorcyclists a royal welcome and continuous entertainment. But let me say this: The four national tours to Columbus are giving the riders a world of pleasure, and Columbus will have to hurry to show the boys more fun than they are having on the way.

"We are just loafing along, enjoying the scenery and the fresh air. We start each morning when we get ready and we stop at any point along the route that proves of interest. That's better than riding on a train, isn't it?

"The motorcyclist knows what freedom means. He can go anywhere—at any time. His machine is always ready. It costs but a trifle to operate it. It is simple—and above all it is comfortable. It doesn't take a skilled engineer to run it. Anyone who can ride a bicycle can ride a motorcycle.

"The increased interest in motorcycling is shown by the wonderful increase in membership of the Federation of American Motorcyclists. It now has more than 16,000 members. It is gaining approximately 750 members each month. The Federation encourages motorcyclists to use and not to abuse the motorcycle. Its influence is bringing the public to realize that a motorcycle—already conceded to be convenient, comfortable and inexpensive—is also clean, silent and almost a modern necessity in business or pleasure. And we believe the four tours to the F. A. M. meet at Columbus will do much to demonstrate these facts to the public."



E. M. ESTABROOK,
Chairman F. A. M. Membership Committee.



ONE of the most significant points to be noted in connection with the four national tours to Columbus is that the riders were recruited from an area embracing a dozen States, thus indicating that touring interest among motorcyclists is no longer confined to half a score of the larger cities. The small-town tourist was much in evidence. In some cases a single rider traveled fifty, or sixty miles in order to join one of the tour branches, but in every instance he managed to join. That was the feature of real import. He might be a solitary enthusiast in a town where solitude was the principal asset, and where he had an absolute corner on the motorcycle interest, but when the tour call reached him he trussed up his mount and went forth to join the boys. The heavy percentage of riders in this class, among the 400 tourists who rode into the convention city, is a highly encouraging feature for consideration with the convention aftermath. Touring with a party of congenial spirits is a comparatively simple matter, but playing a lone hand over bad roads in a sparsely settled district is the supreme test of interest and enduring spirit. Plenty of just such spirit rolled into Columbus on Wednesday of the convention week.

That the tours were successful was admitted by even the most captious. Mishaps that caused serious annoyance were comparatively few, despite the fact that certain stages of the runs took on all the earmarks of endurance contests, and when the four squads met in the convention city there was not a rider in evidence who regretted his part in the four-cornered pageant. Each tour started with a handful of riders, but as the divisions made their way to Columbus little parties joined here and there, and at some of the most out-of-the-way points a rider or two popped suddenly out of a by-road and chugged merrily along with the boys. As a result each division had assumed creditable proportions when the night stops were made before the final jaunt into the Buckeye capital.

While every effort was made to avoid imposing hardships on the riders, the traveling schedules were adhered to fairly well. The entrance of the tourists into Columbus could hardly have been more impressive. The visitors were joined on the outskirts of the city by about 200 Columbus riders so that the squad that finally rolled into the convention city numbered about 600 enthusiasts. A halt

was made just outside the city, and the riders gave their machines and clothing a hurried overhauling. During this stop President Hamilton and other R. A. M. officials reviewed the big squad, and congratulated the tourmasters and their assistants.

Then came the run into the city. President Hamilton took a seat in a side-car driven by W. J. Teubner, who was also carrying P. B. Whitney, of Chicago, on his tandem attachment, and the word was given for the start. The riders were strung out two abreast for more than a mile as they passed into High street on their way to the State House. Traffic was brought to a standstill as the riders entered the city, and thousands of Columbusites lined the streets. When the machines were finally parked for a photograph they made a double line two blocks long.



IN PRISON GARB.

Representing Joliet, the Penitentiary Town:
F. E. Beck, Glenn Peterson and H. F. Stoll, All Harley-Davidson Riders.

Later each rider who finished the tour on time received an attractive medal suitable for use as a watch fob.

The northeastern tour, of which Fred S. Ellett, of Elmira, N. Y., was tourmaster, was the longest, and the start was made on Saturday morning, July 14. The distance traversed was a little over 700 miles. The southeastern tour started at Baltimore, with J. A. Robison, of Baltimore, Md., as tourmaster. This trip of nearly 500 miles was probably the hardest of the four, although the boys from Albany say, with much pride, that they experienced the hardest trip. The northwestern tour of about 400 miles was started on Monday, July 15, on the same day that the southwestern tour got into action. Jesse Campbell, of Dayton, Ohio, and Erwin G. Baker, of Indianapolis, were the tourmasters of these two divisions.

No one will dispute the fact that the southwestern trip was the most pleasant, and nearest to the ideal which the originators of the tours had in mind. Weather conditions were excellent all the way, and the roads, except for a short distance the first day, were unusually fine.

It was not so with the three other tours, for each of them experienced more or less (usually more) rain, and consequently great stretches of almost unrideable roads. These tourists were unfortunate enough to strike many roads which were just being constructed, and as it was either raining at the time, or just stopping, the roads at some places were so bad that detours from the scheduled route were necessary.

Most of the road trouble was in the East near Cleveland, and every one of the tourists who finally pulled through and who had not been heretofore an ardent worker in the cause of good roads, had been converted. The Baltimore tourists, as was to be expected, experienced their most serious trouble in the eastern ridge of mountains, where, to make matters worse, they were caught in the rain. Not all of the Eastern tourists arrived at Columbus on schedule time, and many were as much as a day late.

MAPPING LONG TOUR.

ONE of the summer tours for the Minnesota State Automobile Association is being outlined and mapped by J. W. Whitehead of Minneapolis on a motorcycle.

NEARLY 400 TOURISTS.

AL BARTSCH, of the Bosch Magneto Company, carefully kept and compiled a record of the machines which entered Columbus Wednesday on the four F. A. M. tours. Excluding those who came into town later than six o'clock Wednesday evening, there were 385 participants, their machines being as follows:

Emblem, 11; Thor, 33; Minneapolis, 3; R. S., 3; Pierce, 3; Flanders, 4; Henderson, 7; Pope, 3; Indian, 147; Excelsior, 38; Harley-Davidson, 70; New Era, 5; Wagner, 2; M. M., 3; Merkel, 24; Yale, 29.

Battery equipped, 6 per cent.; magneto, 94 per cent.; 97 per cent. of the magneto equipped were fitted with Bosch instruments.

IMPROVEMENT CONTEST.

OWING to the pressure of convention news and the necessity of getting it into type while it is still fresh from the scene of action several interesting features were crowded out of this issue, among them the first batch of designs and descriptions in the Improvement Contest which was inaugurated in the issue of June 27. More than a score of creditable improvements were submitted in time for publication in this number and they will all appear, with a few later arrivals, in the issue of August 8.

There are four cash prizes, \$50, \$25, \$15 and \$10 waiting for the ingenious riders who submit the most desirable improvements for the standard motorcycle, and designs and descrip-

tions should be forwarded without unnecessary delay. Address them to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

BERKS M. C. RUN.

THE Berks Motorcycle Club, of Reading, Pa., will hold its first endurance run on Sunday, July 28, from North Ninth street, Reading, to Lancaster, Harrisburg, Lebanon and back to Reading. The run will be open to all riders and it is expected that about fifty will participate. Many riders from Philadelphia, Pottstown, Lancaster, Harrisburg, Lebanon, Allentown and Easton have entered. A gold medal will be given to each rider making a perfect score.



1



2



3



4



8



6



7



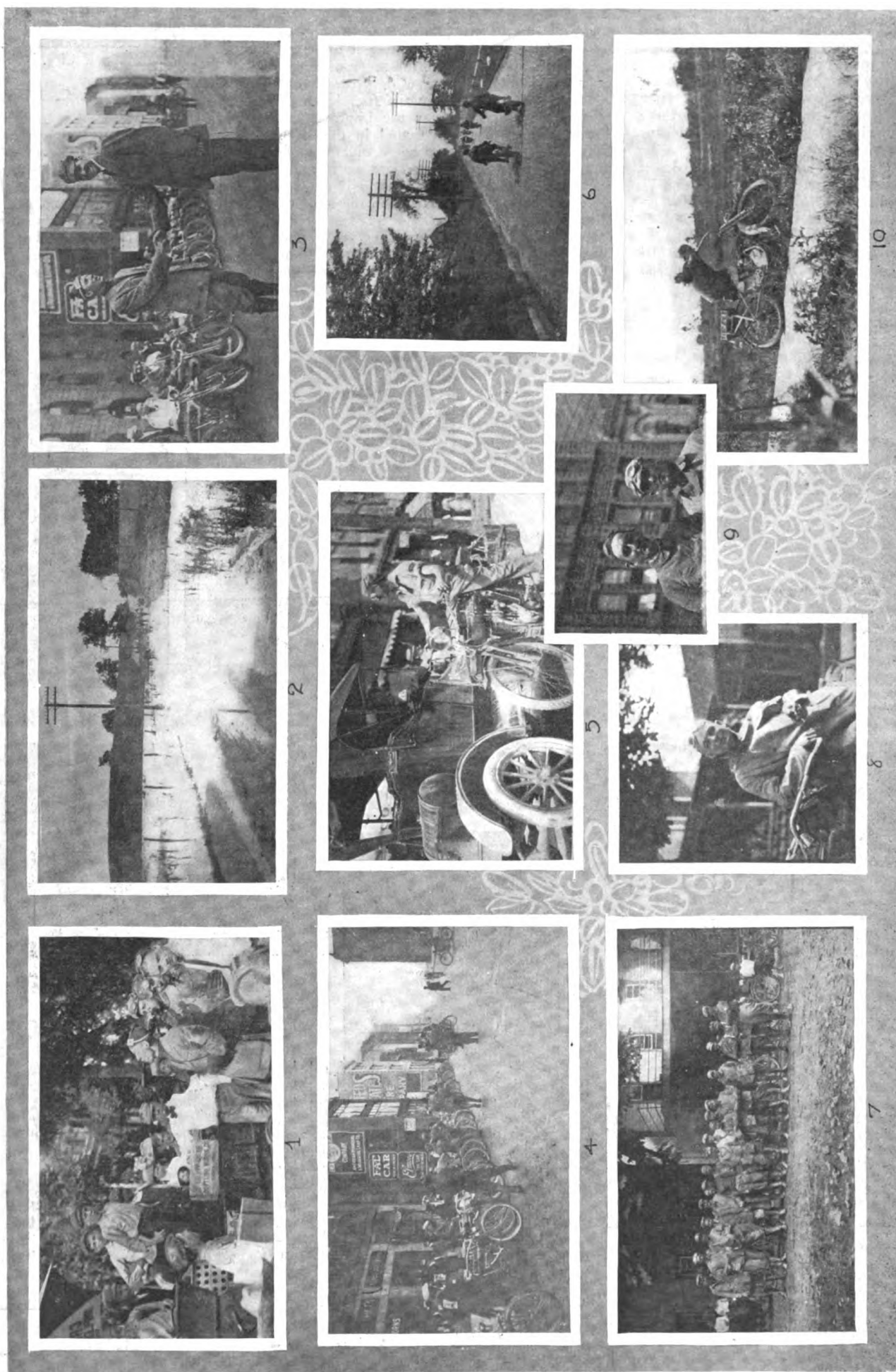
ON THE NORTHWESTERN TOUR.

1. Campbell and lieutenants at Dayton
2. Miss Helen White.
3. "Oh, dear, we have a straw!"
4. One of the "convicts" from Joliet, Ill.
5. They had "pop" at Sidney.
6. Preparing to leave South Bend.
7. Nearing Columbus.
8. A tire replacement.
9. Mrs. Rockfield, of Dayton, and Mrs. Siler, of Indianapolis.

Snap-Shotted by a Staff Representative on the North-Western F. A. M. Tour

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MOTORCYCLE ILLUSTRATED



1. Soda was served at Sidney by the local club. 2. Driving through a foot of water. 3. Whitney wishing Campbell good luck at the start from Chicago. 4. Line-up in Chicago. 5. The two Turners—Harold, of the Minneapolis Company (on motorcycle), and J. A. Turner, of Chicago. 6. En route. 7. Waiting for a drink. 8. Captain Harwood, of the South Bend contingent. 9. Captain Harry Capron and Lieutenant Schroeder, of the Toledo Division. 10. Off the road.

From CHICAGO to the BIG SHOW

CHICAGO, July 15.—Motorcycle tourists began flowing into Chicago on Saturday afternoon, mostly from points in Wisconsin and Illinois, while several were from far away cities, such as St. Paul and Minneapolis. A bunch came in Sunday from Milwaukee on the *Silent Gray Fellows*. Most of the boys spent Sunday in taking the 50-mile tour around the Chicago chain of boulevards. George McIntire, of Cleveland, shipped in to Chicago to make the big tour.

Considerable delay over details made the tourists a half hour later in starting; while they were scheduled to leave at 6 a. m., they did not get off until about 6:30. After the press men were on the job with their cameras, the boys lined up in pairs and soon were off. Michigan avenue was lined for blocks with the two-wheelers. The weather was bad for the photographers, and it looked as if rain would get the best of the tourists. The trip out of Chicago was led by Tourmaster Campbell, with Graham as his first lieutenant. Division "B" was piloted by George Puls, the smiling Harley salesman, on a new chain 7. Division "C" consisted of only four machines. About sixty-five machines in all left Chicago.

The First Rough Roads.

At East Chicago, the roads began to get rough. Here a bad spill resulted when one of the Flanders riders went down and two machines rolled over him. The machines were put in running order again and again joined in the procession. Bruno Stechard's front tire went bad on his De Luxe twin seven, the first evidence of tire trouble. Out of East Chicago the tourists hit muddy roads with puddles here and there, and skidding was common. Several riders were goggleless and many sore eyes resulted, as the roads were dusty. Soon Hammond was sighted and Campbell, on a twin Harley, went to the wayside with a puncture in his rear tire. At Hammond a large crowd turned out to greet the riders and the live motorcyclists of the town were on hand to direct the tourists. Several of the boys stopped at a garage that bore the F. A. M. emblem for oil and gasoline. Out of Hammond fairly good roads greeted the tourists, and a hot sun beamed down on them. Dust covered machines and riders. Some sand was experienced and a halt was called by Tourmaster Campbell at a sharp turn to warn tourists of a change in route. The roads as scheduled were under reconstruction and this necessitated making a detour of a few miles into Hobart. At Hobart, some of the boys stopped for oil and gas and a few went through swinging doors; this was especially notable in Division "B," captained by Puls, from Milwaukee.

A Bad Sand Patch.

Out of Hobart, the tourists met trouble, as they ran into a construction gang repairing the road. A few of the boys went back and took a different road, while most of them went down off the road into a valley, a sort of a thick woods, and pushed around the sand, which appeared to be at least three feet deep. It took two men to a machine to make the lift; a derrick would have been more appropriate. The two-speeds spun their wheels in the sand and were simply overwhelmed, as the sand was too deep to get even a bite on the road. They, too, finally joined the pushing brigade. A stop was made to see that every one got safely around the torn-up spot. The *MOTORCYCLE ILLUSTRATED* automobile, which left Chicago, went back to Hobart for a detour.

Later, the tired tourists found a fine macadamized road, but to their dismay, it soon ended in a rutty road with plenty of dust. This continued into Valparaiso. Threatening clouds foretold rain, and the order went out to beat it as fast as possible and many thought that the run into Ft. Wayne would be impossible, as much time was lost on account of the road conditions. At Valparaiso a large banner read "Welcome F. A. M. Tourists." Out of Valparaiso a very fair macadamized road was found, but it was very dusty.

Almost a Road Race.

As the sky still threatened rain the boys rode faster and for a while it looked as if the Northwestern Tour would end in a road race. The boys hit up an awful clip for country roads for a stretch of 15 miles, averaging close to 45 miles an hour. The crew of the automobile piloted for *MOTORCYCLE ILLUSTRATED*, said that they made forty, and were unable to keep in sight of the fast-traveling tourists. About six miles out of La Porte, Ind., several La Porte riders met the tourists and escorted them into the city. Just before entering La Porte Turner, the Minneapolis tourist, broke a chain. This was quickly repaired by Turner, who knows the mechanical end of the game as well as the office end. At La Porte a short stop was made for the benefit of those who needed gas and oil. The La Porte M. C. was absent, although it was in the air that the drinks would be on the club. Several good fellows of the La Porte squad showed the tourists the way out of the town and started them on to South Bend.

After riding roads that were good, dusty, rutty and indifferent, the climax for the tourists came when a lake extended for 70 feet across the road, about three feet deep. This brought a halt and the riders considered it for a few minutes. Then Division "B" blew up, with Puls at the head. Puls looked for a moment at the stream and then decided to take a daring chance

and ford it with his Harley. Many of the boys said it was impossible, but Puls turned the trick. Although his magneto was under water, he negotiated the pond in good style. He was followed by three others, one of whom went down with his machine completely covered with water. One made the ford and the other pushed. It was then decided to take no chances and a detour through a cornfield was necessary. This brought out the farmers, who evidently did not like motorcycles and threatened arrest if the boys kept on using their property for a public highway as they called it. Finally the farmers kept the boys from going around the stream, and it was a case of riding back twelve miles or walking through the water; and the boys walked, much to the surprise of the farmers. After draining the water from his carburetor, the lad who fell in the water got his motor going and all were under way once more over a fairly good road. The sun came out and the threatening clouds drifted away.

In South Bend at Last.

A little sand was experienced into South Bend. On arriving the boys all lined up in the public square in neat fashion and then scattered for dinner. After filling up with gas and oil, they started at 1 o'clock. Out of South Bend the route was very narrow and dusty, with a ditch four to six feet deep on each side of the road. More than one tourist took the ditch route. A passing automobile would not give an inch to the boys, and it was a case of stop and let the car go by; several took a chance and passed by a hair's breadth, but no serious accident resulted. More tire trouble was experienced at this point, and several riders were passed tinkering with machines. One rider, who was absent-minded about fuel, had the pleasure of stopping the *MOTORCYCLE ILLUSTRATED* car for enough gasoline to run into Elkhart where he filled to capacity. Into Elkhart the roads were fine. George Puls took a graceful slide getting into town and his riding pals gave him a big laugh.

Out of Elkhart there was more dust and the weather gloomed up again and looked like rain. A stretch of crushed rock, with the appearance of being very fresh, cut many a tire and a good many riders took to the grass along the side of the road. Soon the tourists found themselves going into Goshen, where the largest crowd of the day turned out to meet them. Evidently the newspapers had the dope in advance; at any rate the Press Man was swamped with inquiries. After a short stop, during which Tourmaster Campbell conferred with the town constable, a kind hearted old gentleman, he ordered all machines and vehicles other than motorcycles to clear the way for "them there motorcycles," and once more they hit the roads. The roads were of the rutty kind and very

dusty. The riders strung out in single file, it being dangerous to ride in pairs on account of the bad going. This lasted for several miles; then came more crushed rock for a quarter of a mile.

Tanks Filled at Ligonier.

About three miles from Ligonier M. S. Hersey, of Alben, met the tourists and led them into the town, where they stopped for gas and oil. A bunch of the boys feasted on a half bushel of apples donated by Puls. After a delay of twenty minutes, Mr. Hersey led the boys over a fine soft dirt road into Churubusco, where he wished them good luck and started back to Ligonier. Only a three-minute stop was made at Churubusco. Out of Churubusco the tourists hit an oiled stretch and skidding was common. Over fine roads of macadam and hard clay, the boys struck a clip of 45 miles per hour. Finally E. R. Francis, of Newark, Ohio, on a Harley, met Tourmaster Campbell and they beat it into the outskirts of Ft. Wayne, where they stopped and waited for the bunch of dust-covered but happy Northwesterners to pair up. Just before the squad landed on the main street rain began to fall. The Anthony Hotel got a large percentage of the tourists, while the Wayne was the real home of khaki suits, red bandannas and tassel caps.

That Downpour of Rain.

Ft. Wayne, Ind., July 16.—Oh! you second rain on the heels of the night's cloudburst! The start was a half hour late, it being eight o'clock when the boys got away. Several of the riders had punctures early in the day, but the rest kept the pace set by Tourmaster Campbell, it being slightly slower than the previous day as the mileage was forty miles shorter. The roads were full of puddles and it was a case of you splash me and I splash you. The automobiles were soon left far behind by the tourists, and here it was demonstrated that the motorcycle could make better time than the automobile on bad roads. A lad named Shipp, on an Excelsior single, skidded and went down and R. H. Martin, on a big seven, had the pleasure of running directly over the Excelsior and going off the road into a ditch with badly bent pedal crank and handlebars. The roads continued muddy and the boys eased up somewhat. Soon Van Wert was sighted, where a short stop was made. At Van Wert the newspaper boys were on the job and so was H. M. Bienz, with a large portable tank of gasoline. He escorted the tourists out of town for a distance of five miles over very watery roads. Delphos was passed without a stop and soon Lima was within a handshake. Several of the Lima riders met the tourists and led them into the town, where a band greeted them and they were invited to the clubrooms. The boys went, too. Here dinner was enjoyed. At 1:30, after a stop of two hours, the boys took to the road again.

Out of Wapakoneta the roads were very rocky; then came a stretch of mud. Some walked and some did the skiddy glide over the spots, while many took flops. In Sidney the Sidney M. C. greeted the tourists with ice-cold tubs of bottled soft drinks and the gang surely took to the bottles. After a cheer for the Sidney squad, the riders headed for Piqua over fairly good roads. The sun had, in the meantime, im-



Purdy, Wickwire and Dudley Smith, Who, Riding Indians, Made the Journey Between Chicago and Columbus in One Day. They Were on the Road Seventeen Hours.

proved the muddy roads somewhat. In Piqua the boys were greeted by an F. A. M. member with a camera, who took a seven-foot photo with the promise of bringing it to Columbus. After the Piqua M. C. had distributed five large baskets of cheese, ham, egg, hamburger and salmon sandwiches, the boys rode on into Troy, where a Dayton M. C. bunch in an automobile and several motorcyclists met the tourists and informed them that a different route would be necessary to get into Dayton as a bridge was closed on the route as scheduled.

From Troy the roads were of the bumpy sort and exceedingly dusty. At Ebernezer the automobiles made a roundabout run into Dayton, but the motorcycles continued and went over the bridge that was supposed to be closed and waited outside of Dayton for the automobiles. At Dayton the boys lined up at the Algonquin Hotel. Machines were garaged and the riders went to hotels. The Algonquin was the official hotel. At Dayton about thirty-five riders joined the 125 already in line. Miss Helen White, of Indianapolis, was on hand with her Pope to make the trip with the crew into Columbus. She had ridden down from Indianapolis. Mrs. O. W. Rockfield and Mrs. F. M. Siler rode tandems with their husbands.

On the Last Leg.

Dayton, July 17.—Today the last stretch was before the boys and they were eager to get to the Convention City, but Tourmaster Campbell called a start by twos at short intervals. Jacobs, the New Era rider, captained Division "E" out of Dayton. The lunchroom across the street from the Algonquin was crowded with the boys who were late getting out of the hay. Outside of Dayton a stretch of very muddy roads bothered a number of riders. Tourmaster Campbell fouled a plug and was left behind for a few miles, but he soon breezed to the front. One rider, on an Excelsior single, got six punctures in a row and was delayed. From mud to dust and ruts was the order of the road; then came a hill with stair steps that made the one lungers hump some and the big twins take flying leaps into the air. Plenty of puddles also were found. Large crowds were on hand to see the boys join Baker's squad of speedsters from Indianapolis. Many of the Columbus boys were at Springfield to escort the combined body of southwest and northwest tourists to the Convention City.

List of Chicago Starters.

Jess A. Campbell, tourmaster, Dayton, Ohio.
W. W. Ingram, lieutenant, Rutland, Ill.
S. J. Chubbuck, lieutenant, Toledo, Ohio.

Division A.

R. W. DuSell, captain, Aurora, Ill.
Jos. DeSalvo, lieutenant, Chicago, Ill.
R. F. Lombard, lieutenant, Chicago, Ill.
Anton Ernst, Chicago, Ill.
Wilmer Reichert, Chicago, Ill.
A. H. Felcamp, Chicago, Ill.
C. E. Jensen, Jr., Chicago, Ill.
Theo. R. Isbell, Chicago, Ill.
A. J. Euzenbacher, Chicago, Ill.
A. W. Baumann, Chicago, Ill.
W. F. Reder, Chicago, Ill.
J. R. Schutzur, Chicago, Ill.
Max Stuhlfant, Chicago, Ill.
Jno. Herman, Chicago, Ill.
Bruno Stechbart, Chicago, Ill.
H. S. Nelson, Chicago, Ill.
Francis Longhi, Chicago, Ill.
Jack Vernon Seaver, Chicago, Ill.
E. B. Cameron, Chicago, Ill.
Russell E. Lee, Chicago, Ill.
Allen F. Huber, Chicago, Ill.
W. H. Kallemeir, Chicago, Ill.
Guy W. Webb, Minneapolis, Minn.
H. F. Turner, Minneapolis, Minn.
Jenis Hapgood, Morgan Park, Ill.
Geo. Kohlhardt, Cudahy, Wis.
Jno. Florence, Racine, Wis.
C. E. Carpenter, Grand Rapids, Mich.

Division B.

Geo. Puls, captain, Milwaukee, Wis.
H. W. Hascall, lieutenant, Milwaukee, Wis.
H. V. Campbell, lieutenant, LaCross, Wis.
Wales Chipp, Chicago, Ill.
R. V. Peterson, Chicago, Ill.
J. H. Stowell, Chicago, Ill.
R. H. Martin, Chicago, Ill.
H. F. Stoll, Joliet, Ill.
T. E. Beck, Joliet, Ill.
G. C. Peterson, Joliet, Ill.
Harry Knutson, St. Paul, Minn.
J. A. Bick, Rockford, Ill.
B. F. Stone, Minonk, Ill.
H. E. Hinricks, Minonk, Ill.
Louie Dirks, Fairbury, Ill.
C. F. Goudy, Fairbury, Ill.
P. N. Bushnell, Aberdeen, S. Dak.
J. W. Harper, Miami, Florida.
G. C. McIntire, Cleveland, Ohio.
G. W. Bryson, Elkhart, Ind.
A. N. Arenz, LaCross, Wis.
R. P. Williams, Wilmette, Ill.
Roy O. Chipman, Grand Rapids, Mich.

B. A. Waltz, Detroit, Mich.
A. Van Loon, Streator, Ill.

Division C.

G. C. Harwood, captain, Marion, Ind.
Lee Stougaard, lieutenant, St. Paul, Minn.
J. E. McCurdy, lieutenant, LaPorte, Ind.
J. E. Murray, Hobart, Ind.
E. W. Schillo, Hobart, Ind.
L. M. Wahl, Three Rivers, Mich.
A. L. Cumhle, Three Rivers, Mich.
B. C. Bradford, Pontiac, Mich.
L. J. Blunder, Pontiac, Mich.
P. C. Heaner, Marion, Ind.
H. C. Gaskill, South Bend, Ind.
H. G. Earley, Gary, Ind.
Chas. Weatherhead, Elkhart, Ind.
Frank W. Alsip, Chicago, Ill.
H. Sonneborn, LaPorte, Ind.

Division D.

C. F. Schory, captain, Ft. Wayne, Ind.
Clarence Brace, lieutenant, Ft. Wayne, Ind.
E. D. Brunalt, lieutenant, Ft. Wayne, Ind.
S. Z. Davis, Ft. Wayne, Ind.
Lester Kurtz, Ligonier, Ind.
E. R. Francis, Newark, Ohio.
C. C. Palmer, Chalmers, Ind.
C. E. Kern, Jackson, Mich.

Division E.

H. E. Capron, captain, Toledo, Ohio.
J. W. Schroeder, lieutenant, Toledo, Ohio.
Harry Hearn, lieutenant, Toledo, Ohio.
F. J. Wilhelm, Toledo, Ohio.
J. W. Tassell, Toledo, Ohio.
H. Warnke, Toledo, Ohio.
L. Bersticker, Toledo, Ohio.
Robt. Hinds and wife, Toledo, Ohio.
W. R. Dreher and wife, Toledo, Ohio.
H. M. Long, Toledo, Ohio.
Vernon Craft, Toledo, Ohio.
Fritz Schauss, Toledo, Ohio.
A. G. Weiler, Toledo, Ohio.
Stanley Kutz, Detroit, Mich.
Earle T. Sutton, Detroit, Mich.
H. T. Platz, Detroit, Mich.
Frank S. House, Fremont, Ohio.
Ralph E. Morris, Fremont, Ohio.
J. E. Walker, Bowling Green, Ohio.
Howard Gebhart, Bowling Green, Ohio.
R. J. Walker, Bowling Green, Ohio.
E. E. Ducat, Bowling Green, Ohio.
A. F. Mercer, Weston, Ohio.

Division G.

I. F. Jacobs, captain, Dayton, Ohio.
Thos. Wollenhaupt, lieutenant, New Lebanon, Ohio.
Wm. Stricker, lieutenant, Laura, Ohio.



Arrival of Motorcycle Paraders at Columbus Motordrome.

E. E. Hegerman, Dayton, Ohio.
O. W. Rockfield, Dayton, Ohio.
D. B. Brown, Dayton, Ohio.
Wm. Christie, Dayton, Ohio.
Irving Howich, Dayton, Ohio.
F. J. Stachler, Dayton, Ohio.
Paul Monroe, Sidney, Ohio.
Rex Sarver, Sidney, Ohio.
G. K. Fulton, Sidney, Ohio.
L. Reichard, Troy, Ohio.
W. O. Lane, Troy, Ohio.
W. M. Latin, Troy, Ohio.
E. A. Falknor, West Milton, Ohio.
C. J. Hoefler, West Milton, Ohio.
R. M. Wenger, Richmond, Ind.
W. H. Osting, Richmond, Ind.
Earle Wright, Richmond, Ind.
Ward Jones, Laura, Ohio.
Forrest L. Barr, Lima, Ohio.
W. D. Shephard, West Carrollton, Ohio.
L. O. Rhoades, Bloomer, Ohio.
A. C. Wagner, Celina, Ohio.
D. Scott, Pittsburgh, Pa.

Division H.

C. T. Henderson, captain, Springfield, Ohio.
Frank Welschans, lieutenant, Springfield, Ohio.
Harry Hicks, lieutenant, Springfield, Ohio.
J. W. Richardson, Springfield, Ohio.
R. E. New, Yellow Springs, Ohio.
Earle L. Belt, Springfield, Ohio.
A. Castello, Springfield, Ohio.
Mrs. Adeline Belt, Springfield, Ohio.
E. E. Gannon, Springfield, Ohio.

R. E. Barcofar, Springfield, Ohio.
Mrs. M. G. Grove, Springfield, Ohio.
M. G. Grove, Springfield, Ohio.
J. R. Purdy, Chicago, Ill.; Dud. Smith, Chicago, Ill.; Rex Wickwire, Chicago, Ill., rode from Chicago to Columbus in one day.
Harry G. Jacobs, Chicago, Ill., MOTORCYCLE ILLUSTRATED press car.
J. A. Turner, Chicago, Ill., MOTORCYCLE ILLUSTRATED press car.
H. H. Huntsbery, Cleveland, Ohio, MOTORCYCLE ILLUSTRATED press motorcycle.
T. J. Sullivan, Chicago, Ill., Motorcycling press car.
Geo. P. Miller, Chicago, Ill., Motorcycling press car.
A. B. Maier, Chicago, Ill., Motorcycling press car.

ANNUAL LISTER OUTING.

CLEVELAND, Ohio.—The Lister Motorcycle Company, distributors for Harley-Davidson and Flying Merkel machines, recently gave their annual chicken dinner to the boys riding their makes of machines. About 150 machines lined the block near the Lister establishment early in the morning and after a line-up for a photograph, they were led by "Bill" Lister over a joy ride on Cleveland's chain of boulevards. The run ended on the Sprague road, at Mrs. Deitrick's chicken farm, where the boys spent some time in foot racing and other games while the chickens were being prepared.

A vote of thanks to the Lister Brothers was given by the boys, who then hustled back to the city in time to attend the races at Luna Motordrome in the evening.

A TRAFFIC ORDINANCE.

COLUMBUS, Ohio.—Motorcycles as well as automobiles and all horse-drawn vehicles are included in an ordinance recently enacted by the City Council of Columbus, Ohio, which requires vehicles to come to a full stop while approaching street cars discharging passengers. An exception in the interest of traffic is made in the case of downtown congested sections, where the vehicle does not need to come to a full stop.

COLUMBUS, Ohio.—The American Machine Co., 338 North High street, has contracted for the central Ohio agency for the Henderson.



Arrival of the Western Tourists at the Outskirts of Columbus.

How BAKER'S SQUAD *went Through*

SEVEN motorcyclists—dubbed “the lucky seven”—lined up for the start of the Southwest Tour at Louisville, Ky., on Monday morning, July 15, in front of the Seelbach Hotel. The start was made promptly on schedule time at 6 o'clock, for Tourmaster Erwin G. Baker, of Indianapolis, and the six other riders had been on hand an hour before starting time. The riders were jovial over the fact that there were just seven in the party; they took this for a good omen, which it really proved to be later on. There were not many people about the hotel when the start was made, and considering the number that started, and the manner in which they got under way, it can not be said that the start was “auspicious.” However, as the tour grew from day to day, the departures from the cities in which stops were made proved to be very interesting to hundreds of onlookers, and a good impression was created.

Helm in Hard Luck.

But to get back to the start—the “lucky seven” didn't remain seven very long. Those who formed the original “luck” group were Tourmaster Baker, of Indianapolis; William Helm, of Owensboro, Ky.; Frank Marshall, of Louisville; Peter Kline, of Louisville; Robert Sturm, of Indianapolis; Henry Pardom, of Owensboro, and Earl Trabue, of Mitchell, Ind.

It fell to the lot of William Helm to break the “seven charm.” Helm traveled about thirty miles from Louisville, and there he stopped. He didn't do it willingly, either, for he had expressed his desire before starting to win a medal for finishing. However, the gigantic hills of Brown County, Indiana, proved his undoing. Helm was riding a four-horse machine, and when he came to the steepest hill on the route—Snakey Curve, which is two miles long—his machine refused to climb, and he had to stop. There was nothing left for him but to turn back, as he didn't feel like using the “ankle express” on the many hills that were still ahead of him. Baker and the rest of the “lucky seven” tried to help Helm along, but after stopping for some time to see what they could do for him, the remaining six started on their way again, bidding their friend goodbye.

The trip through Brown County was by far the most interesting part of the Southwest Tour. It was a fact to be regretted that only a small number took advantage of the trip through that country, for, from a scenic standpoint, as well as from the standpoint of historic interest, nothing on the remainder of the trip to Columbus could compare with it. The six riders had a great time in the hills and they took their time, stopping at farm houses, and the little country towns along the route.

Refreshments at Bloomington.

The noon stop on Monday was scheduled for Bloomington, Ind., the home of Indiana University, which the tourists visited. In keeping with his plans to arrive at all points on sched-

uled time, and to follow the same rule when leaving, Tourmaster Baker brought his men into Bloomington on the dot, and they settled down for a good dinner at a bakery-restaurant, where all arrangements had been made by a press representative who followed the tourists. At Bloomington the riders found a garage where they renewed their supplies of oil and gasoline.

From Louisville to Bloomington the actual riding distance was found to be 96 miles, although on the tour sheet it was booked at 75 miles. The riders' actual riding time averaged a little less than 20 miles an hour, which was extremely good considering the hills. Four stops were made on the morning journey. The riders decided to alter their course a bit at the start of the tour and leave Louisville by the New Albany route instead of via Jeffersonville, Ind. It cost each of the seven riders 25 cents toll to cross the Ohio River at Louisville. The weather was great for riding, the hilly roads were good, and all the tourists were feeling fine when they reached Bloomington. They still believed that their “seven charm” would remain unbroken even though they had lost one of the original seven.

The good luck they were hoping for was again assured soon after they left Bloomington, for at Martinsville, they picked up Earl Potter, of Paragon, Ind., and once more the lucky combination ruled the tourists. Potter stuck all the rest of the way into Columbus.

On a Hilly Stretch.

Where the tourists had the most fun Monday was between Bloomington and Gosport. There were hills, and more hills, between these two towns, as well as many stone quarries, and the scenery was refreshing. The paths and roads followed by the tourists were winding, and it was with some difficulty that the riders kept to the best part of the roads. Just at the bottom of “Ole Snakey Curve,” on Taber Hill, was a creek. It was about thirty feet wide, but only a couple of feet deep, the bottom being of rock. Tourmaster Baker first waded across to work his kodak on Sturm, who was the first to ride across, or rather to try to cross the stream. “Bob” tried to cross, but his machine wouldn't “cut it” and he got stuck in the middle, while the others on the banks sat down and “kidded” him. Sturm got off his machine and pushed it across, and then it was his turn to watch the others try to ford the water.

Tourmaster Baker declared he knew “the only place” to cross, and waded back to get his machine. Needless to say, Baker got stuck also, and he finally resorted to the method used by Sturm to get to the other side of the stream. The other riders didn't attempt to ride but waded the whole distance.

The riders soon left Gosport, where they stopped for a time, and they enjoyed some beautiful scenery on the way to Paragon. About that time it grew dark and the tourists feared they would be caught in the rain which

was ahead, for the roads were muddy and hard to traverse. The seven miles to Martinsville were the worst of the whole Southwest Tour. As the six riders approached Martinsville about 4 o'clock in the afternoon they felt their good luck slipping and each one was prepared for the storm which was still a little distance ahead, and which had been heralded to them by many people along the route who had come from the opposite direction. A few drops of rain fell as they entered Martinsville, but before the looked-for rain could do any damage, Earl Potter appeared on the spot, joined the riders, put old “lucky seven” back in good standing again and saved the day. The boys went ahead then without fear. It didn't rain. The clouds rolled away, and the hearts of the tourists were glad.

In Indianapolis on Time.

The riders reached Indianapolis, the night stop, on scheduled time. They stored their machines at John Kinney's shop, and put up for the night at the Colonial Hotel. The men from Louisville traveled 165 miles on Monday, with their actual riding time averaging about 18 miles per hour. At Indianapolis the tourists were joined by almost forty others from all parts of Indiana, Ohio, Illinois and Missouri. These tourists, who were to make their start in the morning, also put up at the Colonial Hotel and garaged their machines at Kinney's. Mr. Kinney also furnished the tourists entertainment Monday evening and turned his spacious storeroom over to them.

Tuesday.—It was very gratifying on Tuesday morning to see forty-two motorcycles in line at the Soldiers' and Sailors' Monument, in Indianapolis, ready for the start of the second day's journey, which was to end at Springfield, Ohio, Tuesday evening. There were eight riders from Kokomo, Ind., in line for the start, and Baker appointed Noble Shepard, one of the bunch, a lieutenant. G. A. Scott, of Marion, and Calvin East, of Logansport, were also appointed. The St. Louis delegation joined at Indianapolis. There were five of the boys from that city, representing the St. Louis Motorcycle Club, and they were accompanied by three other St. Louis motorcyclists who made the complete trip in a Ford delivery wagon. They acted as the “trouble” car on the tour to Columbus and proved very helpful along the route. The men in the automobile were F. Greenfield, G. W. Duncan and H. Dyck.

Mrs. Helen White, of Indianapolis, joined the tour Tuesday morning and was the only woman rider on the trip. She now wears a medal for finishing on time. She proved to be a happy subject for photographers along the route and was photographed plentifully.

If the motorcyclists had been given the power to order “tailor-made” roads from Indianapolis to Springfield, and on into Columbus, they could not have asked for better roads than those they traversed on the remainder of the tour from Indianapolis.



THE SOUTH-WESTERN TOUR

1. Top—Robert Sturm, of Indianapolis, trying to ride through Snake Creek near Bloomington, Ind. Below, left to right—Earl Trabue, Frank Marshall, E. G. Baker, Robert Sturm, Henry Pardon and P. H. Kline, the six who started from Louisville.

2. Frank Marshall fording Snake Creek.

3. Tourmaster E. G. Baker.

4. Lieutenants Kline, Sturm and Marshall and Tourmaster Baker.

5. The road near Dayton. George Puls and H. Haskell, of the Harley-Davidson Company.

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SOUTH-EASTERN F. A. M. TOUR

1. Suzette, belonging to F. L. and Mrs. Valiant. Suzette was the only canine tourist.

2. Top photo. shows Yale machine wrecked by electric car. Below—Coming into Columbus.

3. The original starters at Bedford Springs. Line-up at Pittsburgh. Baltimore, Chambersburg and Hagerstown escort.

4. Miss Mace and Frank Olmstead, the latter manager of the Goodyear branch in Baltimore.



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Six South-Western Tourists.

Last Leg a Joy Ride.

There was just one road, the famous National road, which was used by the tourists on Tuesday and Wednesday, and the pike is one of the greatest in the country. This road led directly east, right into the convention city, and the riders couldn't have got lost if they had wanted too. Along the road all the way was an interurban line, and it was rather embarrassing to the motormen on the limited traction cars to see the motorcycles pass. There is no use denying the fact now that it is done, although the riders' instructions were to keep within the 20 mile per hour limit.

The second day's trip, while it was not a road race or speed contest, furnished the riders all the opportunity they cared for to do fast riding, and the fact that the tourists averaged 27 miles per hour for the actual riding time on Tuesday bears out the statement that there was "some going." However, there was not an accident that day or on Wednesday, and the last two days of the tour were uneventful.

To get back to the details of the run on Tuesday, the first stop the tourists made was at Cambridge City, Ind., where they replenished their oil and gasoline tanks. They reached Cambridge City at 9 o'clock, after starting from Indianapolis at 6:50. The distance was about 40 miles. From Cambridge City on to Columbus, it had rained the night before and rain had helped to make the roads more perfect.

Richmond, Ind., was passed shortly before noon and the tourists stopped forty minutes to look over Earlham College and to take a rest. Then they started to hurry on to Dayton, Ohio, passing through Eaton, on the way. The tourists reached Dayton at 12:30 and stopped at the Algonquin for dinner. A body of eighteen riders from Cincinnati, under the leadership of Olin Ross, had reached Dayton shortly before the tourists from Indianapolis, and when the combined body left for Spring-

field in the afternoon at 3 o'clock, there were over sixty machines in line.

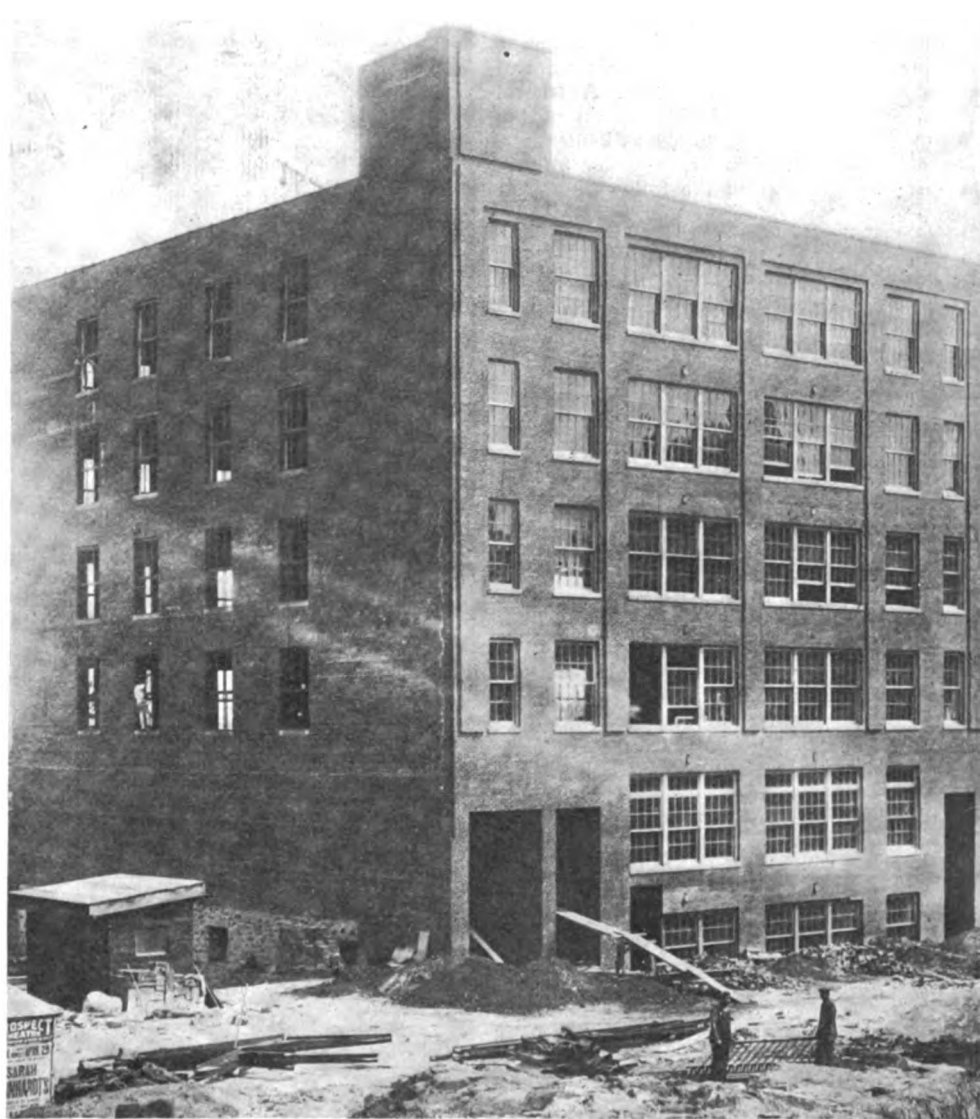
The tourists reached Springfield soon after four o'clock, the distance from Dayton being 25 miles. The riders put up their machines at a number of the places provided by the motorcycle dealers in the town, and roomed at the Bookwalter and Arcade Hotels.

Word was given out by Tourmaster Baker that the body would move toward Columbus at 8 a. m. Wednesday, and the riders went to bed early. There was some disappointment expressed by the riders because Tourmaster Campbell was holding his men at Dayton over night, instead of bringing them to Springfield, as at first planned.

Wednesday.—As the southwest tourists were lined up at the public square in Springfield on Wednesday morning at 8 o'clock, Tourmaster

Campbell and his body of riders on the Northwest Tour from Chicago, dashed down the street unheralded and joined Tourmaster Baker's men. The Northwesterners rested a short while at the public square while Baker and Campbell conferred, and at a quarter after eight, Tourmaster Campbell led the body of 200 or more tourists out of Springfield.

As the riders went single file and about a 100 yards apart, it gave each one a good opportunity to "cut loose" in the country. As stated before, better roads could not have been asked for. The riders passed through Vienna, Summerford and West Jefferson. The latter town is just twelve miles from Columbus, and the macadamized road stretching all the way between the two cities was a real boulevard for the riders who reached the convention city tired, tanned and dusty—but happy.

**NEW MESINGER FACTORY.**

THE H. & F. Mesinger Manufacturing Co. is having erected a spacious new factory at 144th street and Austin place, New York, one block east of the Southern boulevard. The factory, which has 30,000 square feet of floor space, is of heavy mill construction throughout, and is particularly well lighted, so that first-class work will be facilitated. It will be equipped with new machinery, specially designed for the production of the Mesinger saddles. The first floor will be occupied by the offices, and there will be the employee's entrance and stock room in the rear, with the

freight elevator on the same side as the offices. The second floor will be given over to the machinery and stamping departments, while the third floor will be used for the leather department. On the fourth floor will be located the assembling and finishing departments. Coupled with the company's already extensive saddle business in America, which has made a new plant very desirable, an increasing export trade is a factor which promises to necessitate even further enlargement. The Mesinger, it is announced, will be standard equipment on Merkel and Indian motorcycles for 1913.

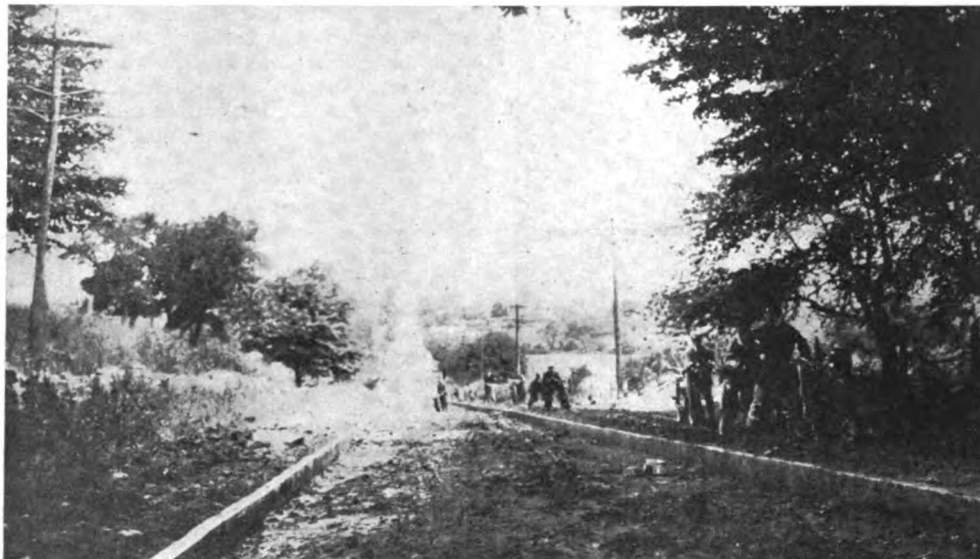
On the NORTH EASTERN Route

ALBANY, Friday, July 12.—When motorcyclists from eastern and southern New York and Massachusetts began to assemble here for the tour to the convention city the club rooms of the Albany Motorcycle Club were thrown open, and the local motorcycle agents co-operated to accommodate the riders. On Friday evening the Albany M. C. held a dinner and smoker, and the plans for the tour were fully explained by J. Matanley, acting tourmaster. F. L. Hunt, of Albany, was unanimously elected captain of the tour, and he appointed B. M. Spencer, of Attleboro, Mass., and Donald B. Goold, captain of the Albany Motorcycle Club, to act as lieutenants. The riders all retired early, in order to prepare for the long grind the following morning.

Off on Long Grind.

Saturday, July 13.—F. S. Ellett, tourmaster of the northeastern division, arrived at 3:30 a. m., and immediately perfected the itinerary for the first day's run. Wm. Hetherington, Jr., of Brooklyn, N. Y., was appointed checker of the tour. Promptly at 7 a. m. twenty-nine riders assembled in front of the clubrooms at 336 Central avenue, ready to start; among these were delegates from nearly all of the eastern F. A. M. clubs. Donald B. Goold and Howard Smith were delegates from the Albany Motorcycle Club. Each rider was checked out and a route card given him, after which the official photograph was taken. The riders then started in two sections, each in charge of a lieutenant. Tourmaster Ellett, T. Matanley, assistant tourmaster; F. L. Hunt, captain; B. M. Spencer, lieutenant, and eleven other riders constituted the first section, while Lieutenant Donald Goold and Checker Hetherington, with twelve other riders, composed the second section.

Each rider was distinguished by an F. A. M. arm band on his left arm and a large



Heavy Going at Mendon, N. Y.

numeral signifying the section he belonged to printed on the back of his coat. The riders were paired off, and in this way delays were eliminated. If any rider had trouble his riding mate stopped to assist him, and subsequent events proved that this was a wise move on the part of the tourmaster.

Good Roads at the Start.

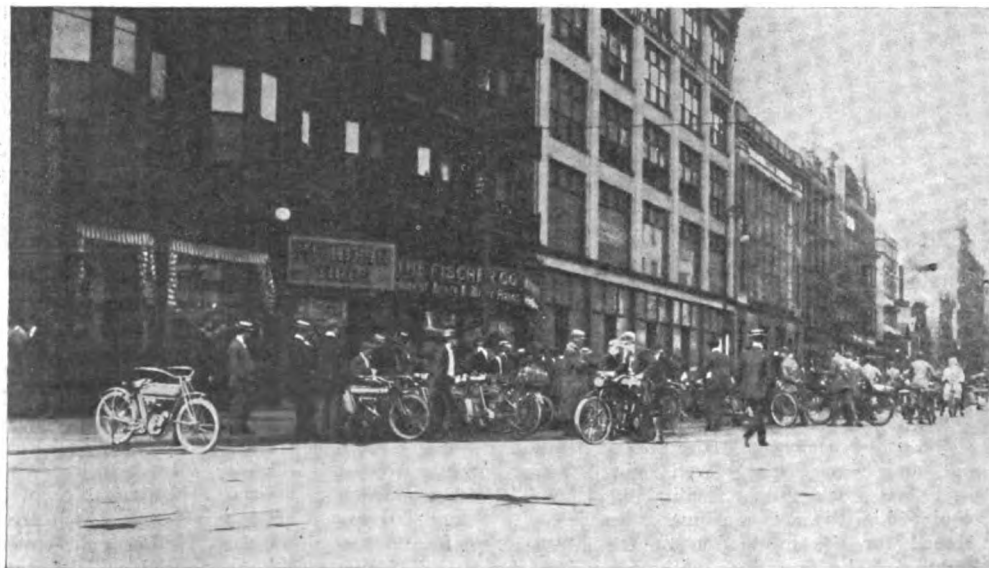
Perfect roads were met with at the start, and the 25 piloting motorcyclists of the Albany M. C. set up a lively pace. Schenectady was the first stopping place, and here the division was increased by two additional riders. The photographs of the two sections of the division were taken, and then the journey was continued. The route then lay through Hoff-

mans, to Amsterdam, over splendid macadam roads. Just before entering Amsterdam, a long steep hill, which was very sandy, gave the riders no little trouble, due to the tourists riding too close together. The tourmaster's attention was drawn to this by the checker, and when the stop was made in the heart of Amsterdam the tourmaster instructed the boys to allow a safe distance between each pair of riders and reduce the chances of spills. The ranks of the tourists were here increased by an additional rider.

A throng of people had gathered in Amsterdam to witness the parade of the riders, and when the riders sped swiftly on the journey, all with mufflers closed, many of the throng were heard to remark on the absence of noise. The division was piloted through Amsterdam to the city limits by representatives of the local club. Five miles from Amsterdam rough roads were met with, and they continued until the town of Fonda was reached. An extremely bad, sandy stretch of road was met with just before entering Fonda, and here some of the riders had falls, none of them serious, however.

The Going Becomes Heavy.

From Fonda the roads became gradually worse, until a steep hill was reached just before entering Little Falls. Here the road was being reconstructed, and the riders were compelled to dismount and push their machines, loaded as they were with luggage, to the top of the hill. Some of the riders attempted to ride through the deep mud, and one man succeeded. Wm. Hetherington nearly succeeded in navigating the mud, but just as he was congratulating himself on having gained the top of the hill, his engine stalled and the machine fell over on its side with Hetherington sitting on the red-hot engine. The rider quickly scrambled from his warm perch, al-



Northeastern Tourists in Amsterdam, N. Y.

though not quite quick enough to prevent burning the seat of his pants. A short wait was made for the other riders to catch up, and then the journey was continued, the roads becoming better. The town of Herkimer was next reached, and here a dinner stop was made, as it was then 1 p. m. The riders at this point were one hour behind the schedule. After a thirty-minute stop the riders continued on through Illion, Utica, New Hartford, Oneida Castle, Chittenango, Mycenae, Fayetteville to Syracuse, over excellent roads. The schedule time was made up between these towns, and the riders arrived in Syracuse at 5 p. m., after having covered a distance of 153.1 miles for the day's run.

None of the riders had any trouble other than punctures. In the evening the Syracuse M. C. held a smoker for the tourists, and refreshments were bountifully provided. All the Syracuse motorcycle dealers cheerfully stored the riders' machines, filling them up with

gasoline and oil, and in numerous cases supplying small spares to the boys. After the smoker the riders returned to the Hotel Onondaga, the official headquarters, and retired. Promptly at 7 a. m. the next morning, after each man had been checked out, the riders moved away to the accompaniment of the good wishes of the Syracuse riders.

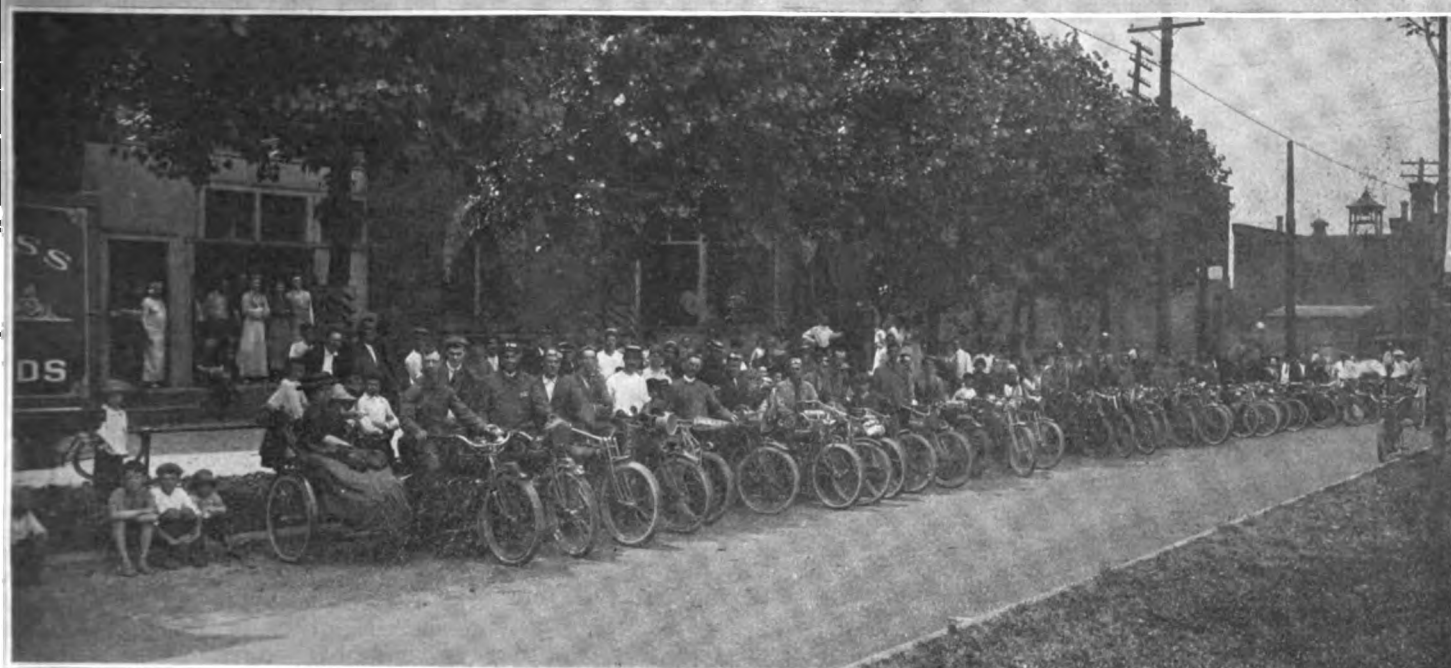
A Veteran Joins.

One tourist was added to the rapidly swelling number of riders at Syracuse. From this point the route led through Camillus to Elbridge and to Auburn, where a brief stop was made. At Auburn "Andy" Kraus, the Indian dealer of Auburn, joined the tourists. This gave the northeast division the distinction of having the oldest member in its ranks, Mr. Kraus having attained the ripe age of 57 years. His mount was an Indian T. T.

Between Auburn and Seneca Falls some very slippery and muddy roads were en-

countered. Here Howard Smith, who was riding a Flying Merkel machine, with J. Murdock as passenger, came to grief, taking a bad fall, and bending his engine shaft. With some difficulty the shaft was pounded back nearly straight, and Smith pluckily started on the trail of the riders. The bunch was held at Cayuga Lake by the ferry boat being on the opposite side of the lake. All the riders enjoyed the brief rest which the trip across the lake afforded.

After leaving the ferry the boys had a hard pull up a stiff grade, and the riders of singles had their hands full to negotiate the climb. By easing out their clutches, however, they managed to make it. The roads into Geneva were fairly good, at which point four more tourists joined the division, making a total of 38 riders. At 10 a. m. the division was on its way to Canandaigua, the riders being 45 minutes behind the schedule. Tourmaster Ellett led the boys at a lively pace,



Northeastern Tourists in Erie as the guests of the Continental Rubber Works.

in an effort to regain the lost time, but the roads would not permit of any speed, being rough and rutty, and the boys fell further behind the schedule.

Through Canandaigua, Holcomb, Menden and Pittsford, the roads were what might be called fair. Here some of the riders began to have trouble. B. M. Spencer, lieutenant of the second section, broke two chains and had a hard fall. The machine was not damaged, but there wasn't much left of the headlight. W. Worth, one of the Yale riders, experienced engine trouble, and T. J. Conroy towed him back to Syracuse, where repairs were hastily made, and then the riders "beat" it to regain their division.

Spills Break the Monotony.

W. Hetherington, Jr., broke a driving chain at Pittsford, and had to wait for the next rider to catch up in order to borrow a chain link. In crossing the barge canal bridge into Rochester, C. Rohver, riding an Excelsior, hit a large stone. He was thrown from his machine and his scalp was cut in three places.



"Feeding" the machines at the Continental Rubber Works in Erie.

Teasdale came in for his share of hard luck when he collided with a delivery wagon. Fortunately he escaped without injury, the only damage being to his steering head. Floyd Cox got tangled up with an auto, breaking the forks of his machine, which was rushed back for repairs, and Cox joined the division the following morning. To do this he was compelled to ride from 3:30 a. m. He was not injured.

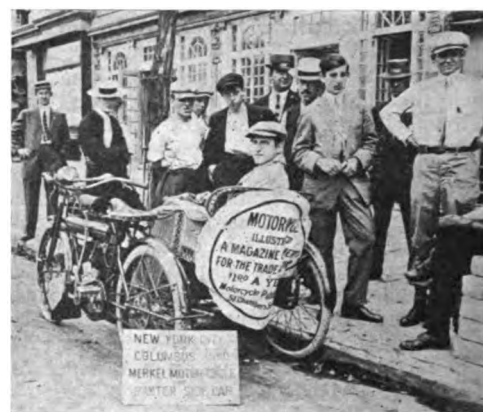
Rochester Had a Booster.

At Rochester the division was re-enforced by one rider. Talking about Rochester, that excellent city never remained long in obscurity, due to the efforts of "Doc" Levis, who never missed an opportunity to impress upon his fellow riders the merits of his home town. Sad to relate, Doc, due perhaps to his linguistic bent, did not pay enough attention to the proper adjustment of his spare parts, which he consistently shed along the road.

From Rochester the route lay over excellent roads to Scottsville. Here Lloyd Benjamin became homesick and bade farewell to his brother tourists, and started home. From Scottsville to Sand Hill the roads were good, despite the ominous name of the town. Over winding roads, in fine condition, through some

beautiful scenery, the division swiftly sped on its way. At one point the railroad tracks ran parallel to the road, and as the riders caught up with a train each man saluted by cutting out his muffler. The train crew returned the salute by blowing the whistle of the engine. The roads gradually became better, until some of the smoothest, hardest roads that were ever built tempted the riders to investigate the speed possibilities of their respective mounts.

The towns of Garbutt, Caledonia, Leroy, Stafford, Batavia, Pembroke, Clarence and Williamsville, were quickly left behind, and in a compact body the division rode into Buffalo, two abreast, making a splendid impression. Not a sound of a muffler cut-out was heard. The arrival at Buffalo was only 10 minutes behind the schedule, the miles of splendid roads having allowed the time to be made up. The Buffalo M. C. gave the riders a splendid reception. Refreshments were plentiful. In the evening the riders all attended the club smoker. Mileage for the day, 196.5.



Harry Mapp (extreme right) and Merkel and Baxter side-car, just before leaving New York.

ing riders an extra good time, and the riders fully appreciated it.

The wives of the officials of the Continental Erie Company served the banquet, and saw to it that every rider received the limit in good things.

After the banquet gasoline and oil tanks were replenished, and tires and supplies were given to those who needed them. A photograph of the riders was then taken in front of the factory, and the division sped away on the next leg of the journey, after thanking Mr. Surré and the ladies for the fine reception they had received. Chas. Imhoff, who had ridden from Albany, decided that Erie was far enough for him, and dropped out. Three riders joined the division here.

Tourmaster Ellett in Trouble.

From Erie the route led through Fairview, Girard, East Springfield to Conneaut over very good roads. F. S. Ellett, tourmaster, broke the driving chain of his machine twice at this point, and Arthur Ferris and wife had a slight spill. Donald B. Gould, lieutenant of the third division, broke the spark control wire on his machine, and obtained a piece of binding wire from a nearby farmhouse, and made temporary repairs until he reached the next town.

From Conneaut the roads became sandy until Ashtabula was reached. Here a mile



Ed. Kaiser, a New Era tourist.



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1. In the mud on the Northeastern Tour.
2. Start of Northeastern tourists from Albany.

3. Tourmaster Fred S. Ellett, of the Northeastern Division.
4. A repair by the roadside.

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stretch of deep sand caused the riders a few anxious minutes. M. M. Matanley, assistant tourmaster, hit the sand going fast, and his machine turned turtle, breaking the rear forks and hub. Mr. Matanley fell in the sand and was uninjured. The machine was shipped back and Matanley rode into Cleveland via train. Only thirty-one riders arrived at Ashtabula on time, the others being scattered. From Ashtabula the roads were fair. The division, which now numbered sixty men, in four sections, tried to keep riding in order, but the poor roads made it impossible going into Painesville. The second and third sections became lost, making a detour of ten miles and coming back almost to where they started. Doc Levis had his pennant pinned to his back, as he thought that would be the best place for it. He had obtained a new inner tube at Erie, and when he attempted to remove his coat at Painesville, he found his tire fastened to his coat. At Painesville a heavy storm overtook the riders, and they were thoroughly drenched before they could obtain shelter. One of the Indian riders fell on the oily road and broke the glass in his crankcase, letting the oil run out. He quickly inserted a half dollar in place of the glass and rode into Cleveland that way.

To Cleveland in the Rain.

From Painesville to Cleveland, 35 miles, it rained continuously, and a number of short-circuited magnetos gave trouble to some of the riders. Only 22 riders arrived on time at Cleveland, the first being B. A. Swenson and wife with side-car; M. Gale and wife, with Yale "Sociable," B. A. Spencer and R. Ronald. The last man to check in on time was Wm. Hetherington, Jr., who had been leading until the city limits were reached, when his magneto short circuited, and a half hour's delay was caused. The stragglers came in gradually. Tourmaster Ellett, Captain Hunt, Lieutenant Weatherbee, and five members of the first section arrived at 6:45 p. m. Some of the men did not arrive until starting time the next day, while a few never reached Cleveland.

B. A. Swenson lost his mudguard coming into Cleveland, and a few of the boys had pedals broken, due to skids on the slippery roads. At one point eight riders were tangled in a mass, and considerable difficulty was experienced in untangling the machines. No one was hurt, and the machines only suffered minor damage. H. J. Levis experienced a loss of compression at 8 o'clock at night, out in the country, and slept alongside the road-way all night, as he was too tired to push the machine to the next town. In the morning he found a farmer's home nearby, and left the machine in the barn and rode in on the train.

The Cleveland M. C. gave the boys a fine time in the evening, holding a smoker and dinner. Free tickets were given to the attractions at Luna Park, and exhibition races were given by Russell Smith and other riders at the Motordrome. Total mileage for the day, 202 miles.

Cleveland to Zanesville.

Thirty riders of the Cleveland M. C. joined the tourists here, and were assigned to the third, fourth and fifth sections. At 8 a. m. the tourmaster started each section of riders at two-minute intervals after each man had checked out. Good roads were looked for, but never found. Mud and water, which covered the machines and riders, caused much

discomfort. Very bad roads were encountered between Richsville and Ghent. Mrs. B. A. Swenson walked through the mud while Mr. Swenson drove the side-car. Some riders fell in a foot of muddy water which completely covered the roads, and they had trouble in starting their machines due to water in the magneto.

One of the riders of a belt-drive machine slipped his idler in order to better make the long pull up a muddy hill. His belt became so hot as to smoke, and he ran into a farmhouse and obtained a pail of water with which to cool the belt. Passing through the town of Cuyahoga the roads were so bad that some of the riders resorted to sidewalk riding. The town constable caught the first man, and a ten-dollar bill was left at the court to cover the cost of the experience. The roads became a little better going into Akron, Ohio, and the leaders of the sections attempted to get their men through on schedule time. Arrival time at Akron was 11 a. m. for the first rider, one hour and twenty minutes behind the schedule, and up to 12 o'clock noon only 18 riders out of 106 who were then in the run had checked in. Goodyear and Goodrich tire pennants were distributed to the boys by factory representatives, and at 12:30 p. m. the journey was resumed.

From Akron to Springfield.

The roads were poor from Akron to Springfield, through Uniontown, Greentown, New Berlin and Canton. From Canton the sections of the division became separated, due to no signs being posted on the roads, and different routes were taken to Zanesville. J. Sullivan, who had been conspicuous throughout the run from Albany by wearing a Panama hat, left Canton for Zanesville, and rode twenty miles. Much to his surprise he came back into Canton. After a few kind remarks about Ohio signs, he was directed on the right road, and arrived safely at Zanesville one hour behind the first section of riders. The first, third and fifth sections were in one division, while the other sections were split into small parties over the country roads.

At New Philadelphia, A. Gingras, who had rejoined from Buffalo, and Wm. Hetherington, Jr., checker of the tour, organized the riders into one section until twenty men had been assembled. In this order the riders set out for Coshocton, a distance of 44 miles, and at 4:30 p. m. they came in in a body, much to the surprise of Captain Hunt and his squad, who only had three men who had maintained their order in the ranks. At 5 p. m. 35 riders had arrived at Coshocton, and as 33 miles had still to be covered before arriving at Zanesville, Tourmaster Ellett gave the word to proceed. Not being familiar with the road, Ellett did not see a sharp turn over a bridge, and had a severe fall which shook him up and broke the pedals of his machine. This caused a delay of 45 minutes, and as darkness was fast approaching, a lively pace was set up by the leaders over rough, sandy roads which wound around steep hills with many sharp turns. Due to the darkness and dust it was anything but agreeable to navigate the sandy stretches. Some riders wanted to sleep in the barns along the road and continue in the morning, but the tourmaster urged all of them to stick to the few remaining miles.

Tourists Fagged from Hard Run.

Gale, on his Emblem, with his wife as passenger, ran out of gas five miles from Zanesville. He obtained some kerosene from a

nearby farm, and continued into town. The riders arrived at Zanesville at 2:30 p. m., 30 strong, completely tired out from the arduous day's journey. The Zanesville M. C. gave the boys a royal welcome, storing the machines, and each rider had a bath in the Masonic Hall, which had been obtained for their use. Up to 1 a. m. only 52 riders had arrived at Zanesville. Mileage for day, 176.

Promptly at 7:30 a. m. the riders on the northeastern division, who had been joined by 50 riders on the southeastern division and five Zanesville boys, started on the morning's run into Columbus, a distance of 52 miles. A brief stop was made at Hebron, where five more riders swelled the ranks. Five of the Columbus M. C. boys had ridden over to pilot the motorcyclists to Columbus, and in squads of twenty each the riders silently sped out of Zanesville. For a distance of five miles fair roads over rolling country were met with, and the riders were beginning to speed up for a fine run into Columbus. The rain of the night previous, however, had turned the ordinarily poor road into a quagmire, and the ranks of the riders became hopelessly disarranged. Walter Savery, on his Indian T. T., hit a hole full of water, and was pitched over the machine into a ditch and the machine fell on him. It took four men to pull him out from his precarious position, none the worse for his experience. Wm. Hetherington, Jr., also had a bad spill, falling into a puddle and suffering severe bruises on his legs. His machine was not damaged except for a broken pedal.

Donald B. Goold, who was riding between the tracks of the traction line, saw an approaching car in time to get out of the way, but J. F. Leuer, who was directly behind him, riding a 4 h. Thor, was not so fortunate. He saw the car too late to save the machine, and had to leap for his life. He escaped uninjured, but his machine was ground under the car, wrecking it completely. The broken machine was loaded into the ambulance car of the Indiana Four States Tour Automobile Club, which was passing at the time, and Leuer rode on in the automobile.

Skids, Spills and Punctures.

C. W. Burke broke down with punctures and a broken clutch. Chas. Good bent the forks of his machine when he fell into a hole. Emendorfer had five punctures in as many miles. Arthur Ferris and wife were out at Cleveland, mud causing them to discontinue the trip. Several minor accidents, skids and collisions proved that the route from Zanesville to Columbus was anything but a pleasurable journey. At noon 50 men of the northeast division, and 35 men of the southeast division had checked in at the Hotel Virginia, the official headquarters of the F. A. M.

B. A. Swenson and wife and M. E. Gale and wife, who came through with a side-car and a "Sociable" had an experience which they will long remember. The side-cars proved that they were able to navigate anything that a two tracker could stand, but the going was bad. Howard Smith and H. Murdock, who came through from Albany on a Flying Merkel, with tandem attachment, also put up a very creditable performance. F. Price, 17 years old, the youngest rider on the tour, ploughed through the heavy going on his 7 h. Indian like a veteran.

Throughout the trip comparatively little tire and engine trouble was experienced by the riders, nearly all of the damage being due to spill and broken chains. While the



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SOME OF THE GIRL TOURISTS

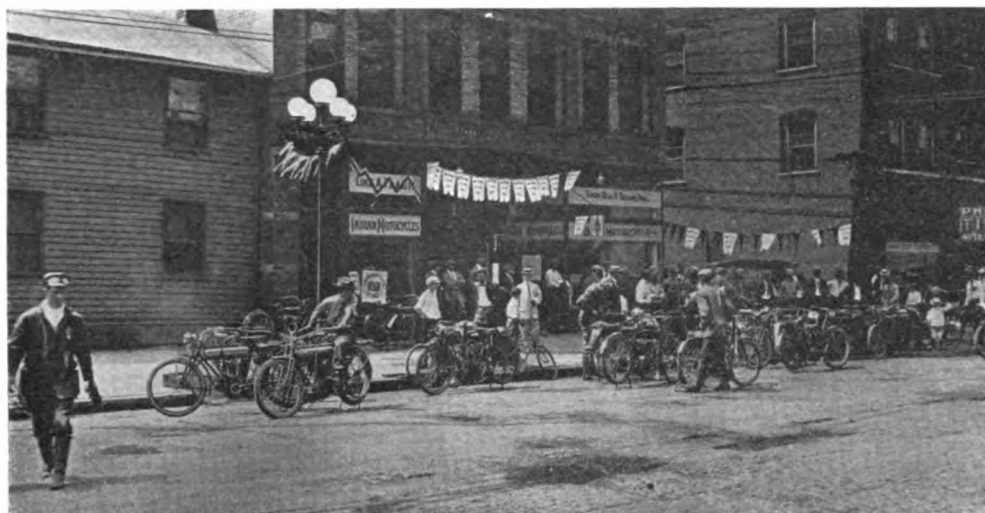
1. M. E. Gale and Mrs. Gale, trans-continental tourists.
2. A fair Thor rider.
3. Miss Helen White, Richmond, Ind.
4. Robert and Mrs. Hiads and William and Mrs. Dreher, of Toledo.
5. B. A. and Mrs. Swenson, of Providence.

5



4





Arrival of Part of the Eastern Division at the Virginia Hotel in Columbus.

F. A. M. classed this trip as a tour of pleasure for the riders, it might properly have been featured as an endurance run on this division. The total distance covered on the last day was 60 miles. Total distance covered 787 miles.

Joined at Albany.—F. E. Ellett, tourmaster, Yale 7; J. Matanley, assistant tourmaster, Excelsior 6; F. L. Hunt, captain, Indian; R. Weatherbee, lieutenant first division, Indian; Donald B. Goold, lieutenant third division, Thor 7; B. M. Spencer, lieutenant second division, Indian; Wm. Hetherington, Jr., checker, Indian 7; Walter Savery, Indian; B. A. Swenson and wife, Indian 7 and sidecar; Dr. H. L. Levis, Indian 4; F. L. Stevens, Yale 7; H. Crosbie, Yale 7; C. Reichy, Yale 7; J. Vedder, Thor 7; Lloyd Benjamin, Excelsior 6; P. Miller, Flanders 4; I. Sullivan, Indian; Harry Mapp, Merkel 6 with sidecar, M. Ullman as passenger; C. R. Greene, Indian 7; T. Conroy, Indian 7; J. Reynolds, Thor 7; R. Jones, Indian 7; S. Whittaker, Indian 7; P. Westcott, Indian 7; L. Wheeler, Indian 7; H. M. Gingras, Indian 7; Howard Smith and L. Murdock as passenger, Merkel 6; J. Imhoff, Indian 7; R. Worth, Indian 7.

Joined at Schenectady.—C. Rogers, Indian 7; C. W. Burke, Merkel 6. Joined at Amsterdam.—Brunnell, Indian 7. Joined at Utica.—R. Rizika, Monarch 5; P. Roth, Monarch 5; Prosper Jenny, Harley-Davidson 4; E. Nelbach, Monarch 5; Arthur Ferris and wife, Harley-Davidson 7.

Joined at Syracuse.—I. Ruhl, Indian 7. Joined at Auburn.—H. Kraus, Indian 7; W. L. Sherman, Indian 7. Joined at Geneva.—P. Allen, Merkel 6; C. Rohrer, Excelsior 4; R. Burgess, Merkel 4; C. Teasdale, Indian 7. Joined at Canandaigua.—I. W. Schutte, Indian 7; Floyd Cox, Emblem 7. Joined at Rochester.—Earl Ellsworth, Indian 7.

Joined at Buffalo.—Wm. M. Gladish, Excelsior 7; Dean Richmond, Indian 7; H. E. Krouse, Indian 5; C. Dahman, Indian 7; F. C. Blankshine, Emblem 7; F. J. Marshall, M. & M. 4; N. Chambers, Indian 7; H. C. Witt, Indian 7; Wm. Rychman, Indian 7; F. Collier, Excelsior 6; H. Evans, Thor 5; T. Pickard, Minneapolis 9; E. L. Kerr, Indian 7; R. Rohlfs, Indian 7; W. Benzie, Thor 4; M. Ronald, Thor 5; A. M. Weiland, Harley-Davidson 4.

Joined at Evans Center.—M. E. Gale and wife in Emblem 7 and special tandem. Joined at Erie.—W. J. Fuermann, Harley-Davidson

7; N. M. Neilley, Harley-Davidson 4; G. C. Unruh, Merkel 4.

Joined at Cleveland.—S. W. Bliss, Indian 7; C. F. Miller, Harley-Davidson 4; W. J. Lister, Harley-Davidson 4; H. Anderson, Yale 7; C. W. Dickason, Merkel 6; H. A. Dickason, Merkel 6; E. J. Emendorfer, Excelsior 4; Wm. J. Ferris, Jr., Harley-Davidson 4; H. L. Enos, Excelsior 6½; N. H. Hauck, Pope 4; O. W. Blackman, Harley-Davidson 4; Wm. Thomas, Merkel 6; Chas. A. Merkel and wife, Pierce 7; C. J. Stahl, Indian 7; Wm. F. Smith, Indian 7; G. W. Williams, Indian 7.

Joined at Cleveland, from Lorain, Ohio.—G. W. Williams, Indian 7; J. H. Kinzle, Indian 7; Tony Carek, Indian 7; Chas. Good, Indian 7; E. L. Gault, Indian 4; Geo. Erving, Harley-Davidson 4; Harry Johhs, Wagner 4; F. Ganoe, Indian 7; F. Mackert, Harley-Davidson 4; K. F. Halblaub, M. & M. 6; J. Leuer, Yale 4; F. Mittendorf, Harley-Davidson 4; C. T. Robbins, Indian 7; C. Rawson, Indian 7; E. G. Walbourn, Merkel 7.

Joined at Akron, Ohio.—A. G. Moranville, Indian 4; A. R. Cover, Indian 5. Joined at Canton, Ohio.—H. George, Excelsior 6; Alfred Lewis, Harley-Davidson 7. Joined at

Zanesville.—F. Rieman, Indian 7; J. I. Sharpe, Yale 4; C. E. Parker, Indian 7; E. L. Atwell, Yale 4; E. R. Crawne, Yale 4; Earl Garrett, Indian 7; F. Price, Indian 7; Donald Reimer, Excelsior 6.

Columbus boys who rode over to Zanesville to pilot the northeastern and southeastern divisions into Columbus.—H. D. Woolley, Indian 7; J. F. Miller, Indian 7; J. Yates, Indian 7; M. France, Indian 7; F. Hammell, Indian 7.

Joined at Hebron.—Chas. McGough, Harley-Davidson 7; J. Fromholtz, Indian, 5; Wm. Gallagher, Harley-Davidson 4; W. Renney, Yale 6½; Roy Hansen, Harley-Davidson 7; F. Gruber, Indian 7.

The following men checked in at Columbus on Wednesday, July 17, in the order named: Ellett, Robbins, Hunt, Kinzle, Weatherbee, Rohlfs, Hetherington, Savery, Lister, Carek, Miller, Drude, H. A. Dickason, C. A. Rawson, Mittendorf, C. F. Miller, Rogers, Cox, Hauck, C. W. Dickason, Williams, Vedder, Cover, Lewis, Jenny, Sherman, Moranville, Sullivan Swenson, Crosbie, Stevens, Reichy, Halblaub, Gingras, Gale, Goold, Bliss, Gault, George, Blackman, Ruhl, Conroy, Wheeler, Walbourn, Burke, Fuermann, Hansen, Kinney, Greene, Miller, Woolley, Roth, Smith, Good, Fromholtz, Gruber, Rennor, Atwell, Sharp, Cramer, Whittaker, Spencer, Merkel, Thomas Chambers, Neilley, Unruh, Rychman, Witt, Smith, Weiland, Pickard, Kerr, Benzie, Ronald, Evans, Dohman, Burke, Ellsworth and Reynolds. All the other men checked in the following day except these men, who were out due to accidents, M. Matanley, H. Krouse, J. F. Leuer, Arthur Ferris and Harry Mapp.

One hundred and twenty-six machines, carrying 131 persons, made up the northeastern division.

NOVEL COURT SYSTEM.

A MINNESOTA sheriff, A. A. Langum, has conceived the idea of a complete court—judge, sheriff, deputies and clerks—on wheels. In other words, he wants the officers to travel about the county in automobiles and motorcycles, arrest, try and pass judgment on all speed offenders and vagrants on the spot.



Start of the Parade in Connection with the Columbus Meet.

LOG' of the BALTIMORE DIVISION •

THE Southeastern tourists made a good start on Sunday morning, but not as early as was scheduled, as the Philadelphia boat, on which were two of the Camden riders and one from Philadelphia, did not arrive until 8:30 a. m. Tourmaster Robison took advantage of this delay by sending out the early risers, under Lieutenant Wix, of Baltimore, with instructions to wait at the top of Soult Mountain.

On Saturday afternoon the out-of-town riders began to appear at the Indian Wigwam in Baltimore. About 5 p. m. George Gilmer, of Charlottesville, Va., came in worn out from a ride over indifferent roads, having been caught in a thunderstorm on the bad part of the road from Washington. He was immediately dubbed "Old Virginia" by the riders, and his quaint and humorous sayings along the route made him a favorite with the riders. John W. Howell, of Philadelphia, was the other arrival, about 8 p. m. He had a bad trip also, as the sand is several feet deep for nearly ten miles near Elkton, Md. Like Gilmer, he had his share of rain.

On Sunday morning the following riders from Baltimore lined up for the start: Tourmaster J. A. Robison, First Lieutenant Wm. Wix, August Zimmerman, Sam Ambach, John W. Howell, of Philadelphia, Pa.; "Isa" Dick, of Philadelphia; John G. Ledyard, of Camden, N. J.; W. Heckerhorn, of Camden, N. J.; Geo. Gilmer, Charlottesville, Va. Howard A. French had transformed his Pullman automobile into a trouble car and had made arrangements to carry a number of parts and tires. Through the courtesy of the Goodyear Tire Co. a supply of casings and tubes was provided.

Those in the automobile besides French, who did the driving, were Miss Margaret Mace, Mrs. H. A. French and Frank Olmstead, manager of the Baltimore Goodyear branch.

The Mountain Trip.

At Frederick three Washington riders, Geo. W. Beall, P. N. Moulden and W. R. Morrison, joined the run. The two mountains in Maryland, the Catocin and the South, were easily ascended, and the riders found a large contingent of Hagerstown and Chambersburg riders to escort them to Hagerstown for dinner. Owing to the lateness of the arrival, due to the boat trip of the Philadelphia riders, it was decided to make a short cut to Mercersburg, which cut off five miles of bad roads and unfortunately left Chambersburg out of the run. Two of their riders had, however, already left for the West, and the Chambersburg riders again played escort to the foot of Cove Mountain. Shortly after this Morrison was picked up by the trouble car with a bad cut in his tire. He was quickly fixed up. In the middle of the next mountain Moulden was found with a sticking exhaust valve and in his hurry to get away he did not get it to seat properly and was taken in tow by Morrison.

About ten miles from Everett the riders ran into a fierce mountain storm which caused much trouble for the riders in the red clay bottom along the Juniata River. Here "Isa" Dick took a spill and did a regular circus act in the air, landing on a soft mud spot, while Heckerhorn went down ten feet of bank into the river. It was hard going plowing through the muddy bottom, and the next rider to be picked up was "Old Virginia," who was doing some tall skidding, his long legs being helpful in acting as props to hold his motor and himself up. It was growing dark by this time and Gilmer, Moulden and Morrison wisely decided that they would not do any skidding in the dark and put up at Everett for the night.

An Emergency Dinner.

The proprietor of the Waverly Hotel proved himself a hero. All the help had left

ened by this time and nothing could stop them. Several miles from Laurel Ridge another storm was encountered, but the going was good till the noon stop at Ligonier and the riders did not mind the rain much. The State of Pennsylvania is doing some grand road building, and at the rate it is progressing the National Highway will soon be a realization of the motorist's dream.

Up Laurel Ridge the going for the most part was exceedingly rough, the road builders being at work, but the west side was a dream, and many of the riders took advantage of the SPEED SIGN, on which was distinctly painted: "Speed Limit, 75 Miles per Hour," and one could attain this gait in the three-mile coast. Everybody was in on time for a good dinner at Ligonier, but just out of Greensburg they ran into another storm, and there was some tall skidding over the rotten



Harley-Davidson Dealers Who Participated in the F. A. M. Tours.

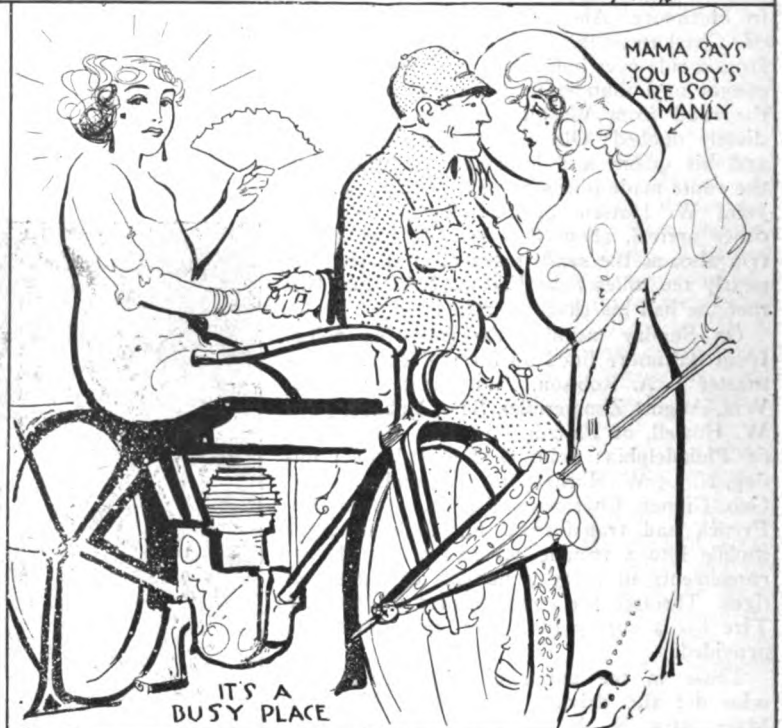
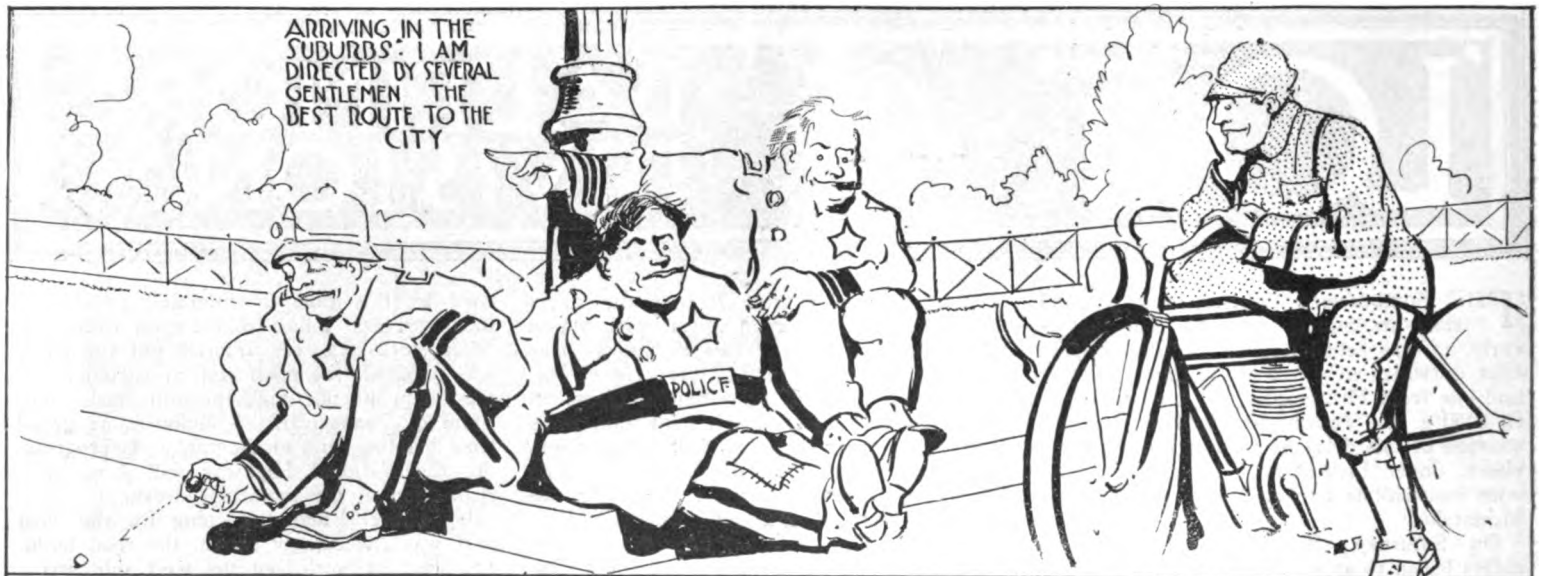
for the evening, but he and his daughters put up one of the nicest meals of the whole trip. All the tables were put together and there was a regular family gathering around the board. Many incidents of the trip were related and the boys were soon off for bed, the Bedford Mountain air not being needed to induce slumber. The day's run was a hard one over five mountains and miles of loose stones.

All the boys were up bright and early the next morning, but not too soon for the riders who had put in the night at Everett. The riders had good going over the first mountain, which was simply a joy ride, but they struck some indifferent roads for 25 miles, several miles of which were torn up preparatory to road building. Stoystown and Buckstown were quickly passed through, and the riding for several miles on top of the main ridge was greatly enjoyed, although this was very sandy in spots. The riders were hard-

roads leading into East McKeesport. Most of the riders beat the storm, but Howell, Zimmerman and Heckerhorn got lost in the woods and after fording several creeks, which had become much swollen in the mining district, finally got straightened out and beat it into Pittsburgh. Beall and Moulén, who had tarried on the mountainside, got drenched to the skin in their effort to make up the lost time before dark.

"Trouble Car" in Trouble

At Ligonier Fred Mertens, of Pittsburgh, joined the run and piloted the tourmaster and his party into the smoky burg. It was well that he did, as this was some job, although the Indian agent at that place had placed tour signs bearing the words "F. A. M. Tour" from East McKeesport in. The "trouble car" lived up to its name on this day, as its magneto gave trouble and necessitated a stop at a garage in Greensburg, where the repairs were



made. Parts for the motorcycles were carried but not a single part for the "buzz wagon," which finally pulled into Pittsburgh at 9.30 p. m. Most of the riders had arrived as early as 5 p. m. A large party left Pittsburgh the next morning, the riders lining up for an early morning picture, and the way they beat it out was a sin. Everybody seemed to have the speed mania, and soon one of the Pittsburghers was down with a deep gash in his knee.

Wm. G. Horn and Jas. Hepburn had left Baltimore on Friday. Hepburn was suffering from blood poisoning in one of his arms, but was determined to make the trip, accompanied by Horn, who had decided to go by easy stages on account of his partner's injuries. Samuel Congdon, of Baltimore, also joined the party, but his trip was short, as somebody not connected with the run took his machine out of the garage while he was at dinner and had such a bad smashup that Congdon was forced to forego any further riding. Shortly after leaving Washington Sam Ambach was found in a lonely spot, surrounded by a band of wandering gypsies. Sam was nearly exhausted from his efforts to repair a badly used up inner tube, and it was very hot in that lonely West Virginia country. Not a tree was near and the midday sun was beating down in all its fury. While Mrs. French

took a picture Miss Mace gallantly sprinkled talcum in the new casing, Olmstead doing the pumping and French and Ambach the repairing. After some refreshments from the welcome Thermos bottle Ambach was on his way. The "Rainmakers" ran into another one of the daily showers just out of Wheeling, which caused another supply of pedal axles to be brought out, but all escaped injury.

Dick Was in Hard Luck.

"Isa" Dick was the next rider to be found on the route. He had already put in one tube, and in his anxiety not to keep Ambach behind had apparently "pinched" it. This had to come out and another tube was put in. Then, being a little weak from his efforts in the hot sun and pretty tired from his already long grind, he unfortunately let his machine fall over, bending a crank. A little work on the mudguards and front fork put him on his way, and he was compelled to ride to beat the band in order to reach Zanesville before the gathering darkness overtook him, as he was then 40 miles from the night stop.

This day's riding was the best on the entire trip. The road to Washington was fine, but the next 25 miles was indifferent, with many loose stones and rocks. Generally the roads were good, although the innumerable water

breaks or "thank-you-ma'ms" made the high speed of the riders dangerous.

This trip was put down as a "pipe"; there were only 55 miles to cover and the boys were not in any big hurry to get off. The road was ordinary to within 25 miles of Columbus, when the "Rainmakers" ran into another storm which converted the yellow clay soil into a veritable quagmire and it was a hard job getting through. Wix, of Baltimore, took a header into the railroad track, while Miller, of Columbus, rolled down a steep bank with his machine, but fortunately came up smiling. This delayed the boys over an hour, and after getting on the good roads Zimmerman and Tourmaster Robison had a spill between them. Both came up with scratches, Zimmerman getting the worst of it with a lacerated arm and hand. There was no bottom to the mud, apparently, and what made it still worse was the "Four States Automobile Tour" plowing through in every direction and cutting it up so badly that the boys could not use the usual side path. Tourmaster Robison deserves praise for bringing every rider through the hard run, as every ridge in the Alleghenies was crossed, lots of sand was encountered and nearly 100 miles of loose stones and boulders were traversed. There was not a single mechanical mishap to anything but the trouble car.

SIDELIGHTS on the BIG TOURS

EX-TOURMASTER WHITNEY was on hand at the start in his "Sunday clothes" and was a welcome assistant to Tourmaster Campbell.

The MOTORCYCLE ILLUSTRATED crew was on hand in an automobile. They rendered valuable assistance to many a rider and were the official crank straighteners.

Whipple, "the Motorcycle Man," of Chicago, made the trip on his Flanders. He experienced tire trouble and had a nail imbedded in his tire in such a way that he was unable to detect it until after it had put three tubes out of business. He camped at South Bend the first night, Ft. Wayne the second night, Wapakoneta the third and arrived at Columbus at 7 p. m. on Thursday.

Harold F. Turner, general manager of the Minneapolis Motorcycle Company, was "one of the boys." He had a luggage carrier that was a record-breaker. He mounted a Big Five with two speeds.

Harper, on a Harley-Davidson, was one of the far-away boys. He hails from Miami, Fla. He was visiting the factory at Milwaukee and took in the run. His hobby is cleaning his machine with his handkerchief.

At East Chicago three riders in Division "C" came to grief when one spilled in front of the other two. Bent cranks and handlebars.

Harry Knutson, on a six Merkel, and his riding partner, Lee Staugaard, on an Excelsior seven, rode down from St. Paul on what they called a very sloppy road, and their machines looked it.

Marion, Ind., was not on the schedule for the first night's stop, but Fred Plock, L. J. Blunden and B. C. Bradford, of Pontiac, camped there. They were accompanied by W. H. Kallemeier, on a Harley, who had tire trouble. They beat it into Ft. Wayne for the start the next morning with the main squad.

Tire trouble was the jinx of the tour and nearly everybody had a taste of it.

Maurice Kahn, on a Flanders, hit a milk wagon at Thirty-first street, Chicago. He continued to Ft. Wayne and went to the hospital when his leg went bad. He thought at first that it would come around, but finally had to give up.

J. W. Atherton, of Moline, lost his way and went to Michigan City. Some motorcyclists not in the tour struck him and damaged his machine outside of Michigan City, and also injured Atherton a bit. The rider did not stop and Atherton got a dray to cart his machine into Michigan City. He shipped home to Moline, got dressed up by a physician and Pullmanned into Columbus. He said he would get there if he had to walk.

Puls made a noise like a brewery at every brass sign. He called a stop of Division "B" three miles out of Ft. Wayne and it cost him \$4.15 for the round.

McIntire was in a class with Tourmaster Campbell who cleaned his machine at each stop. They were threatened with disqualification, but they continued anyway. Someone

angered "Jes" by putting mud on his front mudguard.

J. R. Schutzner made a quick exit when a horse and buggy just ahead of him cut him off. A smashed headlight and a bugged up wrist were the damages. The driver apologized to Schutzner, who was peeved.

Huber Lee went to the starboard ditch on a sharp turn near South Bend. No damages, but he was shaken up somewhat.

Joe Desalvo, the De Luxe racing man, was continually looking for a spaghetti feed store, and he found it in Ft. Wayne. Some say that he camped on the ground, while others assert he left at 3:30 a. m. and left his order for more spaghetti at six in the morning.

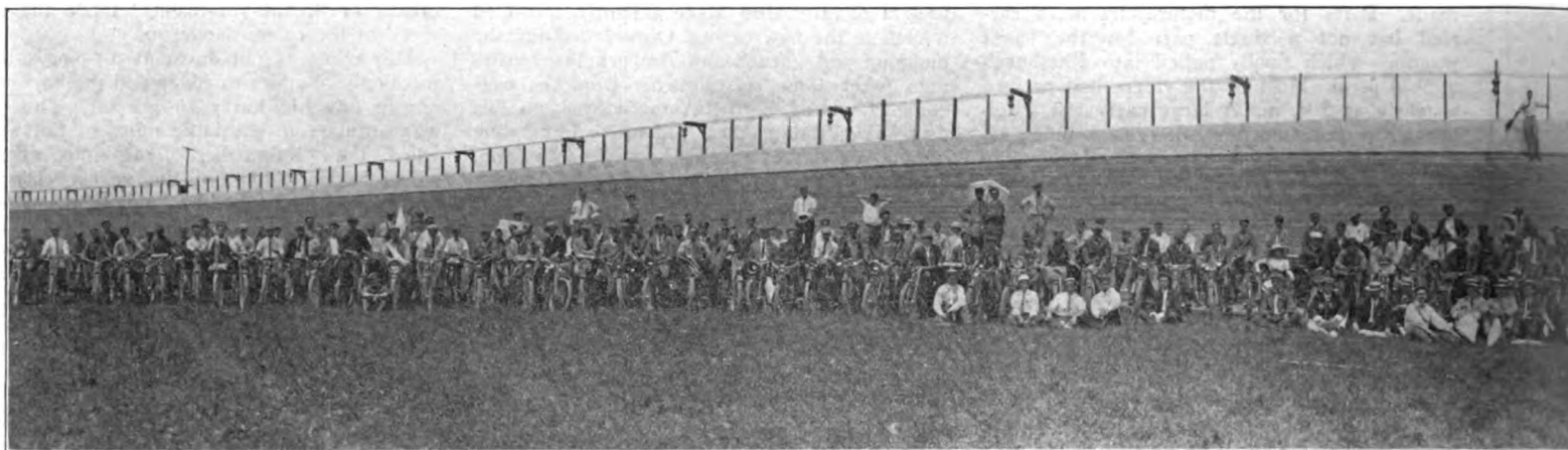
Turner suffered a broken pedal chain which he quickly repaired. He carried "some" gasoline and oil tanks.

At Ligonier the gasoline was certainly dashed out some. Five men on the job and the machines drank hearty.

Talcum powder was used extensively, but too late to prevent Jesse Campbell from spoiling his complexion. One rider carried his talcum supply in one hip pocket and a bottle of almond cream in the other. Someone pulled the cork on the almond cream and—well, you can guess the rest.

P. F. Lombart damaged a dog going into Ft. Wayne. He says he bets that particular dog won't chase a motorcycle again.

The boys had a race outside of Ft. Wayne. Not with motorcycles, but with two young



Just a Small Percentage of the Enthusiastic Participants in the F. A. M. Meet in Columbus Last W

calves that had never seen one of "them there motorcycles" before; they finally admitted that the motorbikes had them beat and quit.

The Diamond Rubber Company gave out touring note books at Ft. Wayne and extended an invitation to make headquarters at their branch in Columbus.

One rider did a polite stunt when he dismounted and held a horse driven by a lone woman until all the machines had passed near Vandalia.

When Dayton was reached many of the machines were pennant bedecked.

F. A. M. arm bands were distributed by Tourmaster Campbell at Lima.

Frank Roman, on a White twin Thor, evidently a new rider of country roads, went down and out on a sharp turn. He collided with a fence post and was unconscious for a few minutes.

At Sidney the boys had tubs of soft drinks and met a jolly good bunch of motorcyclists. Many expressed the wish that they could join in.

At South Bend one rider got the fever and got an extra tire, filled up and joined without previous intent.

The Piqua (O.) M. C. dished out sandwiches of all kinds, and they were welcome.

S. E. Davis, of Ft. Wayne, was the only Henderson rider on the run. His machine attracted no little attention, and he was busy answering questions.

One farmer at a railroad crossing, who had from all appearances been on duty there all his life, said: "I never seed so many of those pesky motorsickles in all my life. There must be fully 500, ain't there?"

A. F. Mercer, of Weston, O., mounted a 7 M. M. machine entirely nickel-plated, but his hopes were dimmed when his front fork was snapped entirely off at the square in Springfield.

H. L. Gebbert, of Bowling Green, rode the smallest machine on the tour, a Yale 3½ h.

Purdy and Wickwire, of Chicago, left on Tuesday and made Springfield in the evening of the same day. Some going. They rode seven Indians.

President Hamilton, Chairman Thornley, Fred Willis and others met the boys outside of Columbus in an automobile.

P. B. Whitney met the boys out of Columbus in a side-car with Bill Tuebner. He took photos with his Graflex at high speed.

Bill Tassell rode so fast from Springfield that he blew his collar off. At least that is the way he tells it.

The boys stopped abruptly at Columbus while cleaning their machines when a milk wagon went by. The milk man sold out.

Mrs. Helen White, of Indianapolis, who rode to Columbus on her Pope, which she purchased especially for that purpose, got a late start at Indianapolis. She waited for Roscoe Neptune, of Columbus, Ind., who had engine trouble. Finally Neptune got started and all went well for a while. However, soon after the two tourists left Cambridge City, Neptune got stuck again, and Mrs. White got a rope and towed him forty miles until they reached Richmond, Ind. At that point Neptune decided he had better drop out, and Mrs. White went on. She stopped at Dayton over night, although she was due at Springfield. She arrived at the latter place with the Chicago tourists the next morning, and rode into Columbus with the combined tour.

Harry Graff, president of the Indiana Motorcycle Club, and George Stone, one of Indianapolis's four motorcycle policemen, made

the trip to Columbus in an automobile, and arrived in the city from Indianapolis in one day's riding. They passed the tourists at Dayton and lunched with them there.

The tourmasters were easily distinguished by their purple and gold sweaters, and the little skull caps of the same color. The lieutenants wore only the caps, which were furnished by the F. A. M. and distributed by the tourmasters.

All the riders obeyed the whistles of the tourmasters. The whistles were very shrill, and could easily be heard above all the noise that the machines made.

The riders didn't mind the sun much. Most of them wore handkerchiefs around their foreheads or large straw hats, or caps with large peaks.

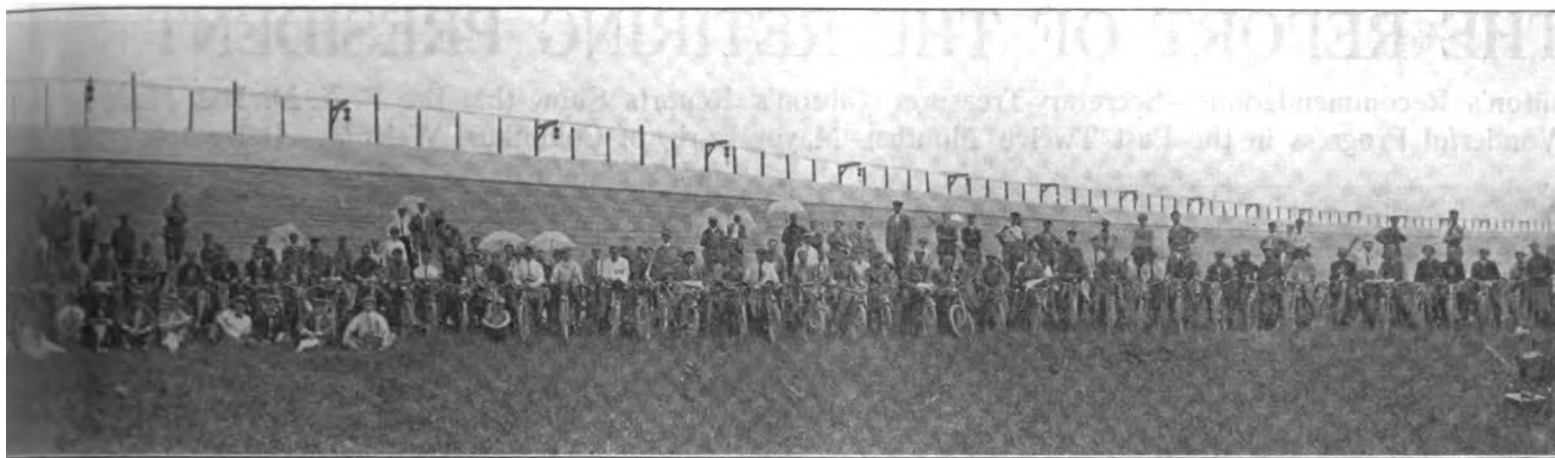
There were three women from Springfield, Ohio, who rode to Columbus on tandems. They were Miss Louise Lyons, Mrs. L. Belt and Mrs. M. G. Grove.

Tourmaster Baker ran over a snake five feet long down in Brown county and killed it. At least that is Baker's story, and Baker ought to know.

Tourists in southern Indiana came to a halt near Bedford, when they saw a girl riding



Edward Buffum and Indian Riders at Columbus. Paul Derkum in the Center.



They Were Lined Up Inside the New Half-Mile Board Track After One of the Championship Meets.

a horse bareback at a fast gait along the road.

At Bedford the tourists stopped to inspect the great stone quarries, which make that town famous.

Tourists on the Baltimore tour were fooled a number of times when they talked to C. E. Parker, of Dunbar, Pa., who is the "double" of Dr. Gibson. More than a dozen men mistook the man from Dunbar for the man from Westboro.

The Kokomo Tire Company gave a new set of tires to each one of the eight Kokomo riders who joined the tour.

Thurman Constable, of Union City, who broke into the limelight last year when he defeated E. G. Baker in a match race of five miles, joined the southwest tour at Richmond, Ind. He was accompanied by F. M. Turner, of Union City, who also rides in amateur events.

The Cincinnati riders, who joined the southwest tour at Dayton, left home at 9 o'clock in the morning, and it took them just 2 hours and 15 minutes to make the 65 miles to Dayton.

William J. Powers, of Indianapolis, a live wire in the Indiana Motorcycle Club, made the trip to Columbus in an automobile. John Kinney, of Indianapolis, also rode to Columbus in a motor car, to be on hand as timer at the races.

George Altnordhoff and Albert Zettle, of Cincinnati, after attending the convention and race meet, started out for Portland, Me. They will travel all over the East, stopping in practically all of the large cities, including New York, Philadelphia, Buffalo, Boston and Cleveland.

Frank Libbey Valiant, of Middletown, who was to join the southwest tour at Indianapolis, was unable to get away with his side-car in time, as he was "tied up" at the Merkel factory. However, he made the trip to Columbus with his wife on Wednesday.

Charles Henderson, president of the Springfield (O.) Motorcycle Club, was on hand to welcome the tourists Tuesday night, and made all arrangements for taking care of the riders' machines for the night. The Springfield club saw that the tourists' motorcycles were garaged free of charge.

The Federal Tire Company made a ten strike when it employed Miss Mary O'Donnell, of Columbus, to pin Federal Tire pennants upon the fellows' coats. The motorcyclists were not satisfied with just one pennant in most cases, and often applied for others. Besides giving away pennants the Federal Tire Company gave to each F. A. M. member a good clothes brush, which came in handy.

The Goodyear Tire Company distributed pretty white parasols, which proved very popular with the ladies.

The Diamond Rubber Company furnished cigars, loose tobacco, and corn-cob pipes at the smoker. They also gave away rubber drinking cups at the convention.

The Goodyear Tire Company had tire cars on the northwest and southeast tours, and they rendered valuable service.

The Reading-Standard Company distributed mirrors and buttons at Columbus.

O. F. McLain, of Indianapolis, who joined the tour there, has a wooden leg extending up well above his knee. However, McLain can ride a motorcycle as well as many riders, and is in the habit of taking long journeys every week.

The Four States Tour—a body of forty Indiana-made automobiles—which is making a 1,600-mile journey, stopped in Columbus July 17 and 18. They arrived in the city about the same time as the motorcyclists from the East, and helped to pull in some machines which were stalled. The wrecked machine belonging to Mr. Leuer, of Buffalo, was picked up by a Four States Tour automobile and carried into Columbus.

The White Thor pennants were very much in evidence at the convention.

The tourists had a hard time to get rooms at the Virginia, the official hotel. Some riders ordered rooms two weeks in advance, but were not accommodated.

Jack Prince and Doc Thornley distinguished themselves at Columbus by wearing white shoes.

The United States Tire Company furnished each tourist a neat F. A. M. watch fob, well worth wearing.

Jack Prince told certain motorcyclists that he is going back to Indianapolis within ten days and is going to build a board track there. "We will have a track there before the snow flies," said Prince.

Eph. Ball, the only F. A. M. delegate from Virginia, made the trip by train, as there were no tourists leaving his part of the country.

BUSINESS AND PLEASURE.

H. H. ADAMS, a wholesale hay merchant at Coffeyville, Kan., has become so enthused over the motorcycle that he has sold his single-cylinder Merkel and has purchased a twin machine with side-car. Adams makes long trips into the country almost every day on his quests for hay, and usually carries a passenger.



Falor (Extreme Right) and the "Goodyear Team."

THE REPORT OF THE RETIRING PRESIDENT

Hamilton's Recommendations—Secretary-Treasurer Gibson's Reports Show that the F. A. M. Has Made Wonderful Progress in the Past Twelve Months—Mayor Karb, of Columbus, Welcomes Delegates.



Upper
Picture
Shows the
Delegates;
Arrow
Points
to
President-
Elect
Patterson.
Lower
Picture:
Mayor
Karb, of
Columbus,
and
Retiring
President
Hamilton.

THE 1912 Assembly of the F. A. M. was called to order in the Virginia Hotel in Columbus Thursday morning at 10 o'clock. President Hamilton introduced Mayor Karb, of Columbus, who said that the convention reminded him of one he had addressed three weeks ago, because it was so different. He told how he had made an enthusiastic speech, which was very feebly applauded, to an assembly of deaf mutes. His Honor stated that he could not help notice the great strides the F. A. M. has made in recent years; that he was heartily in favor of the F. A. M. reforms in regard to open mufflers, tank-riding and speeding; that he thought Columbus had a great motordrome, and he wished the Federation a successful race meet. The Mayor also boosted Columbus, as all mayors boost their home towns, and told the delegates of the interesting things in the city they should see. He finished by turning the town over to the F. A. M., saying, "If any of you boys get into trouble, come see me."

The minutes of last year's meeting were read by Secretary Gibson and adopted. President Hamilton then made his address and, after dwelling upon the progress of the organization, recommended strict legislation against the open mufflers, tank-riding and speeding. He also favored the elimination of the district system. His report and recommendations follow:

When I was elected President of the F. A. M. at Buffalo in July, 1911, the affairs of the organization were in excellent condition, due to the able administration of your former President, Mr. F. I. Willis, and the officers associated with him. The benefit to the organization in a continuing Board of Directors shows for itself in the results accomplished this past year, and I cannot impress upon you too strongly how deeply indebted the F. A. M. should be to the officers who had the foresight to revise our Constitution and By-Laws so as to provide, for the incoming administration, the support of officers who knew from experience what work should be carried on for the benefit of our members.

The Federation of American Motorcyclists was organized the 7th of September, 1903, with 42 charter members. From 1903 to 1909 the membership had

increased to only 2,500. However, the growth of the F. A. M. from 1909 has been remarkable, and it is very gratifying to note that each year we are making steady gains. Our numerical membership July 1 last year was 9,664 as against 16,250 on July 1 of this year, showing a gain of 6,586, or over 68 per cent. Our fully paid-up membership July 1 this year shows an increase of over 63 per cent. as against the same date last year. On July 1, 1911, there were 168 clubs affiliated with the F. A. M. On July 1 this year, 291—a gain of 123, or 70 per cent. On July 1, 1911, we had 313 registered repair shops, and this year we have 678—a gain of 365, or 116 per cent.

Our organization was never in a better condition financially than it is today. Our total receipts for the fiscal year ending July 1 are 50 per cent. in excess of the previous year, whereas our expenses show an increase over the previous year of only 32 per cent. Our assets, consisting of cash and office fixtures, show an increase of 100 per cent. These figures prove conclusively that maximum results have been obtained at a minimum expense and, what is even more gratifying, that we are rapidly reaching the goal for which we are all striving—sufficient funds to give our members more for their dollar.

The splendid showing made this year is not due to the efforts of any one individual, but to the co-operation of all of the officers and many of the members. It is to be regretted that every member has not felt it his duty to get at least one new member each year and by so doing increase the benefits to himself and to motorcyclists in general. I desire to express my appreciation of the support given me by the Officers, the Board of Directors, the Chairmen of the Committees and by individual members, for I realize that our success is due to their co-operation.

Very few of our members realize the vast amount of work that passes through the hands of Dr. G. B. Gibson, our Secretary and Treasurer. It has taken him several years to perfect a system that enables him to properly look after the increasing work of his office, but he is now master of the situation and his report will show how well he is looking after your interests.

When considering the increase in our membership all of you should feel deeply indebted to E. M. Estabrook—that grand old man who has so ably served as Chairman of the Membership Committee. To Mr. Estabrook, more than any other one man, is due credit for the growth of our membership.

REPORT OF SECRETARY-TREASURER GIBSON.

Your Treasurer takes pleasure in submitting to you his Annual Report for the 1911-1912 fiscal year ending June 30, 1912. As this report is the healthiest that it has been my pleasure to read during my nine years of looking after the money of this organization, it is very gratifying to tell you of the excellent financial foundation upon which we stand at the present time.

Receipts.	
Balance from last year	\$1,135.28
Affiliated members joined during year	5,288.00
Unaffiliated members	3,020.00
Members renewing during the year	2,093.00
F. A. M. novelties and miscell. receipts under 50 cents	765.71
Repair shop signs sold (349)	698.00
B. A. Swenson, eastern Buffalo tour entries	82.45
P. B. Whitney, western Buffalo tour entries	85.00
J. P. Thornley, Competition Comm., excess over \$200	2,297.89
Dividend Westboro Savings Bank	10.00
E. L. Moore, rebate of Pacific District funds	17.75
A. W. Green, rebate of Pacific District funds	78.00
Motorcycle Manufacturers' Association, gift to legal fund	60.00
C. F. Gates, fines collected at Los Angeles track	10.00
Eastern Motor Racing Association, Exclusive franchise	250.00
Riverview Exposition Company, exclusive franchise	750.00
Point Breeze Track Company, exclusive franchise	750.00
J. A. McGrath, rebate on pennants	10.00
Total receipts for the fiscal year	\$17,401.08

Expenses.	
G. B. Gibson, Sec.-Treas., salary and mdse. (\$1,020-\$3.50)	\$1,023.50
M. T. Gibson, Asst. Sec., salary and mdse (\$310-\$3.50)	513.50
F. I. Willis, expenses Buffalo trip	42.00
J. P. Thornley, expenses Buffalo trip	42.50
G. B. Gibson and Mrs. Gibson, expenses Buffalo trip	69.00
J. P. Thornley, Comp. Comm., salary allowance	715.00
J. P. Thornley, Comp. Comm. stenographers	715.00
E. M. Estabrook, Mem. Comm., salary allowance	747.50
Miss A. M. Bergh, Sec.-Treas. office stenographer, salary	162.50
Miss L. D. Barnes, Sec.-Treas. office stenographer, salary	109.50
Miss R. A. Harrington, Sec.-Treas. office stenographer, salary	44.57
Harold Young, Sec.-Treas. office boy, salary	45.50
Postage, Sec.-Treas. office for the year	610.50
Express and freight, Sec.-Treas. office for the year	48.34
N. S. Sibley, clerical work for Sec.-Treas.	68.00
H. W. Moses, carpentering Sec.-Treas. office	14.25
E. J. Aldrich, mailing envelopes for Sec.-Treas.	2.50
R. B. Robinson, mailing envelopes for Sec.-Treas.	2.50
Edgar Adams, mailing envelopes for Sec.-Treas.	2.50
Westboro Post Office, Sec.-Treas. box rent and stamped envelopes	333.72
Westboro Electric Co., Sec.-Treas. electric light	9.30
F. W. DeVolf, freight and carting for Sec.-Treas.	30.61
J. W. Fairbanks, bond for Sec.-Treas. and office fire insurance	25.75
B. C. Hathaway, Sec.-Treas. office rent	132.00
G. H. Hamilton, President's office expense	40.88
F. I. Willis, President's office expense, 1910-1911 fiscal year	83.34
E. M. Estabrook, Chairman Mem. Comm., office expense	958.37
Whitehead & Hoag, membership pins	1,612.38
Chronotype Printing Co., Sec.-Treas. office printing	2,131.96
Iroquois Hotel, Buffalo office while at 1911 meet	23.90
Bangor Co-Operative Printing Co., Mem. Comm., printing	899.75
Ingram Richardson Co., repair shop signs	785.22
Meyer Cord Co., transfers (\$25 reward)	107.80
Westboro National Bank, protested checks	12.25
E. E. Vreeland, printing competition rules	150.00
B. A. Swenson, deficit 1911 Buffalo tour	26.95
J. Leo Sauer, expenses Toronto trip	41.35
J. S. Gates, office mdse. for Sec.-Treas.	56.00
A. K. Gammon, office furniture and mdse. for Sec.-Treas.	189.19
Dieges & Clust, solid gold F. A. M. pins	111.38
J. A. McGrath, Columbus meet pennants	70.20
C. T. Terry, legal services for Legal Action Comm.	250.00
L. F. Fales, 3 Oliver typewriters and mdse.	272.85
J. W. Peck, Oliver typewriter	67.50
Nick B. Harris, detective agency, stolen machine reward	25.00
C. F. Chapman, Deputy Sheriff, stolen machine reward	25.00
L. R. Abbott, wiring Sec.-Treas. office	14.25
Office Equipment Co., typewriter desk	17.00
Oliver Typewriter Co., mdse.	8.04
Spies Bros., Lake District medals	70.00
Walker Lithograph Co., U. S. wall map for Sec.-Treas.	2.00
H. F. Chamberlain, mdse. for Sec.-Treas. office	45.50
W. W. Bender, legal services for J. P. Thornley	25.00
G. W. Johnson, Sec. Lynn (Mass.) Motorcycle Club rebate	11.00
Wautoma Implement Co., rebate on repair shop sign	2.00
A. C. Banter, San Jose, Cal., stolen machine reward	25.00
Hampshire Art Press, printing for Old Eastern District	32.00
F. S. Morse, Sec. old Eastern District expense	23.10
Century Catalogue Co., drawings for certificates	45.00
H. Lieber Co., framing resolutions	2.50
W. H. H. Chamberlain, ledger for Sec.-Treas.	1.30
C. E. Beech, mdse. for Sec.-Treas.	.75
C. M. Morse & Son, mdse. for Sec.-Treas.	2.00
T. J. Sixsmith, old Transportation & Facilities Comm., postage	1.00
E. L. Buffington, 1911 Transportation and Facilities Comm., expense	7.25
P. B. Whitney, Vice-Pres. expense, postage and miscell.	36.65
B. J. Patterson, Vice-Pres. expense, postage and miscell.	26.66
J. D. Miller, Vice-Pres. expense, postage and miscell.	7.50
John Rogan, printing for Vice-Pres. La Salle	2.00
S. C. Shackelford, mdse. for Vice-Pres. La Salle	.75
Bridges Mfg. Co., stationery for Vice-Pres. La Salle	4.16
Scranton-Whetmore Co., Vice-Pres. La Salle	73.48
F. S. Betz Co., desk for Vice-Pres. Patterson	20.50
Remington Typewriter Co., typewriter and mdse. Vice-Pres. La Salle	32.25
R. Y. Lesley, State Commission postage	2.00
E. B. Ewell, " " " "	8.00
G. P. Bartlett, " " " "	1.00
G. E. Lain, " " " "	2.00
C. H. Gabus, " " " "	7.14
S. F. Boord, " " " "	8.60
G. W. Baker, " " " "	5.00
E. H. Hamer, " " " "	1.64
E. B. Connell, " " " "	10.65
R. S. Morton, " " " "	27.78
M. E. Harding, " " " "	11.37
M. M. Huyett, Central District Sec. postage	1.94
Total Expenses	\$14,077.07

Probably no man connected with our organization has done more work and received more criticism than Dr. J. P. Thornley, Chairman of the Competition Committee. The Doctor's position is not an enviable one, and the very fact that he has been criticised is the best proof that he has been fearless and conscientious in administering the affairs of his office. Racing has grown very rapidly in this country the past year and a great deal of credit is due Dr. Thornley for the manner in which he has conducted his office.

The Press Committee, of which Fred I. Willis is chairman, has been a very important factor in the growth of the F. A. M. Every manufacturer, every large business and every organization realizes the necessity of publicity. Very few of our members know that the little stories about motorcycling which they read in their daily paper are sent out by our Press Committee. It has been the object of this committee to educate the public through the daily press to the benefits of motorcycling and acquaint it with the work being done by the F. A. M.

The Federation of American Motorcyclists is not a money-making organization. Every dollar is spent in promoting motorcycling and protecting the rights of motorcyclists. Your Directors, including your President, do not draw any salary, and their offices are conducted without any expense to the organization other than stationery and postage. The appropriations made for the Secretary-Treasurer, the Chairman of the Competition Committee and the Chairman of the Membership Committee are very small when compared with the amount of work done by these officials.

The organization has now grown to such an extent that the work in connection with the different offices is burdensome. It is not fair to the gentlemen who have devoted their time in building up the organization to expect them to continue their work without suitable remuneration, while it is not fair to the organization to appoint men to the various offices who haven't the time to devote to them.

It would be an easy matter to establish a central office where all the detail work of the various committees could be looked after, and I would recommend that your Secretary and Treasurer be put in charge and be given an appropriation sufficiently large to enable him to see that the work is taken care of by efficient employees. The plan I have suggested provides a more economical way to handle the work than where appropriations are made for each office. By concentrating the work more can be accomplished at less expense.

Your President and Board of Directors should serve without any remuneration. Having a central office, their duties would not be arduous and they would, in fact, be serving simply in an executive and advisory capacity. They could outline the policies of the organization and let the central office carry out the details of the work.

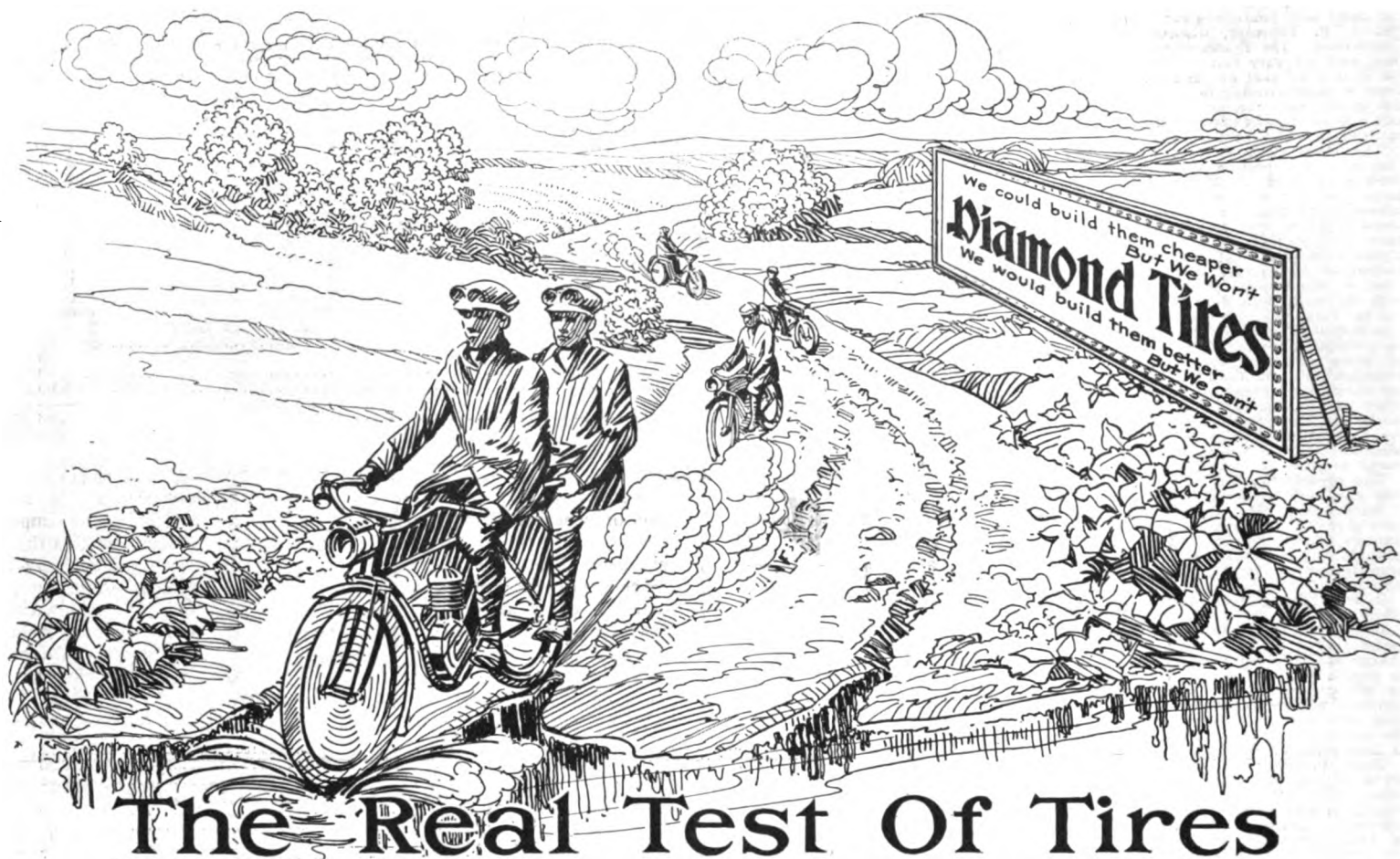
I am heartily in favor of the amendments to our Constitution and By-Laws providing for the elimination of the districts and the appointment of State Commissioners. The rapid growth of the organization necessitates this change. The State, and not a district comprising several States, should be the unit of government. The State Commissioners should report to the National Secretary, and these reports should be tabulated and the Chairman of the Committee advised of any important matters that should receive their attention.

The racing rules will be revised within the next thirty days. Although criticised for not passing upon the rules drafted by the committee appointed for that purpose last year, I wish to explain to this body that I did not believe that five or twelve members had the right to determine the classification of riders. This point will be passed upon by the National Assembly, while the details of the rules will be worked out by a committee.

The F. A. M. has for the past year conducted an educational campaign through the daily press and trade papers in an effort to correct certain abuses practiced by some of the riders. The object of this campaign has been two-fold: First, to acquaint the rider with the injury he is doing himself and fellow-motorcyclists, and, secondly, to let the public know that the F. A. M. is not in sympathy and does not countenance these abuses. I refer particularly to the "Open Muffler Fiend," "Tank Riding" and "Speeding." Every member should constitute himself a committee of one to see that these abuses are corrected. You cannot show your loyalty to the F. A. M. and the principles it represents in any better way. I want to see a resolution passed by this assembly putting the F. A. M. on record as being opposed to these abuses, which only place motorcycling and the motorcyclist in bad repute with the public, and as favoring any legislation that will eliminate these evils.

The F. A. M. is in position to do a great deal of good for motorcycling and the motorcyclist, but whether its power increases or decreases will depend upon the loyalty of the individual members. What we need are not only members, but members who are Boosters. Boost the F. A. M. and you boost your own individual interests. The payment of your dues is only a small part of your duty to the organization. Take an active interest in your fellow motorcyclists, encourage touring, see that all sports pertaining to motorcycling are kept clean, and above all do not overlook the rights of others.

The fiscal year ending July 1, 1912, has been a prosperous one for the Federation of American Motorcyclists, and it affords me a great deal of pleasure to be able to retire as your President with the conviction that the F. A. M. will each succeeding year have a larger membership and greater power. I desire to extend my personal thanks to the officers, the committees and the members, as well as to the public press and trade papers for the support they have given my administration. Although I will not serve



The Real Test Of Tires

The real test of tires is not on the race-track—it is made on the open road where average conditions prevail.

Track and road conditions are entirely different. Tires that are built for speed and speed alone will not stand up under the gurell-

ing grind of the rough and rock-strewn road.

They are designed to be used under ideal conditions—conditions that will not be found even on our finest boulevards! When subjected to the real test they will not stand up.

They can't—they are not built for it.

The Tire Built For Road Results

Diamond Motorcycle tires are built for road results—greatest mileage. Our engineers have analyzed every road condition. Every stress and strain to which a tire is subjected has been met.

Diamond Engineers have at their command all the knowledge gained in 14 years of tire building and rubber compounding. They are the most efficient corp in the world.

It was they who designed and built the first pneumatic tire made in America for motor driven vehicles. That they built well is attested by the fact that today these tires are the largest selling single brand of tires in the world!

But it has not been these men alone—not the knowledge gained by the few—that has made Diamond tires supreme. Ten thousand actual users have loaned their

knowledge. Every problem they encountered they told us of and offered a solution.

With this vast store of facts gathered from every section of the country during a period of 14 years, at their command, our engineers designed Diamond Motorcycle tires.

Endurance was not sacrificed for resiliency, or either for speed. The maximum of each was their aim.

For endurance—ability to stand up and deliver the mileage under the severest conditions—these tires have no equal. Ask for them. Insist on having them. They cost no more than weaker tires.

Made in two treads, studded and corrugated—but only one quality. In single clinch only and all sizes to fit the 26 inch and 28 inch rims, including the 29" x 3".

Send For Our Motorcycle Book. It's Worth Having

*We could build them cheaper—But we won't
We would build them better—But we can't*

The Diamond Rubber Co. of N. Y.

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J. LEO SAUER,
President

EDITORIAL
COMMENTTHURSDAY
JULY 25, 1912

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of Congress, March 3,
1879.

H. N. CONDUCT,
Secretary

The F. A. M.
Meet in
Columbus.

It may be argued that the trade papers could not do otherwise than claim, for each F. A. M. Annual Race Meet and National Assembly, features superior and generally more attractive than those of any preceding occasion of a similar character. But we are not under the necessity of *claiming* big things for the Columbus Meet, as last week's events in the way of business sessions, entertainment and even the races, which were not as successful as they should have been, speak for themselves. As it was, the racing was on a more satisfactory plane than in previous years, while for the failure to make the board track events entirely successful, the officials in charge can hardly be held responsible. As in previous F. A. M. race meets, there was not a sufficient number of entries, and the machines entered were almost entirely of one make, so that there was not the competition necessary to make the meet a very enjoyable one from a standpoint of good sport. No apologies need be offered, at any event, for the interest shown in the business affairs of the organization and the large and enthusiastic attendance of delegates at the different sessions of the National Assembly. The meetings were ably conducted by President Hamilton, and something like one hundred delegates, representing riders in all parts of the country, took an active and intelligent part in selecting their national officials and in deciding important points involving, among other things, amendments to the Constitution and By-Laws, and changes in the rules for competition. Business was transacted with dispatch and, under the leadership of the genial chairman, there was not a single hitch in the entire proceedings. It was largely because of this most satisfactory condition of affairs that the Assembly voted down a constitutional amendment providing for holding the business sessions in the winter in connection with the shows. In the face of what had been accomplished by this year's Assembly, there remained no argument in favor of the change, which undoubtedly would have been approved if the suggestion had been made at Buffalo last year, where one of the business sessions was convened at one o'clock in the morning. If all the national meets are as well attended by interested delegates as was the one at Columbus, there will be no occasion for revising the present plan of summer sessions.



The New
President.

In the election of Dr. B. J. Patterson, the Federation of American Motorcyclists has chosen an energetic, conscientious official. He is enthusiastic in every sense of the word and it is certain that he will do all in his power to double the present already large membership of the organization. President-Elect Patterson, who has served capably as vice-president of the Central District, and who is known throughout the motorcycle world as the promoter of the famous Short Grass Tour, will be assisted in the management of affairs of the organization by such experienced men as Secretary-Treasurer Gibson, who was unanimously re-elected; by Chairmen Thornley and Estabrook, both of whose appointments are assured, and by a board of directors which is fully qualified to render all the assistance the new president may require.



A BUSY COLUMBUSITE.

LEO P. BIRKENBACH was one of the most consistent rooters for Columbus during the campaign to land the F. A. M. convention and as a member of the general committee in charge of plans to entertain the visitors he established an endurance record for geniality and activity. The photograph shows him in one of his rare moments of repose.



F. A. M.
Touring
Bureau.

The convention voted unanimously in favor of a number of important amendments to the Constitution and By-Laws, among them proposals for the elimination of the district system and for placing full responsibility in each State upon the shoulders of a State commissioner. The organization will also establish a touring bureau to take the place of the hitherto inactive touring committees. It will require time to bring this bureau into working order, but while the task is undoubtedly a tedious one, it will be by no means difficult to gather, with the assistance of fifteen thousand members, valuable touring information from all parts of the country. The writer, as publisher of MOTORCYCLE ILLUSTRATED, has had a little experience in conducting a touring department and will be only too willing to co-operate with the Federation in order to help make this important feature of its work successful from the start.



Amateurs
and
Professionals.

The convention adopted unanimously the new classification of competitors proposed by Dr. Thornley, chairman of the Competition Committee. The fact that there was absolutely no opposition to Dr. Thornley's change in the competition rules may be regarded as evidence that the so-called trade rider has come into disrepute in all parts of the country, and that there is an urgent demand for his elimination from the sport. As a result of the adoption of the new classification, there will be only two classes of motorcycle racers, professional and amateur respectively. A professional is defined in the new rules as a rider who has competed for cash, or who, being directly or indirectly connected with the trade or operates motorcycles as a trade or profession, competes on a track, where the public is charged admission. Of course the fact that a man is connected with the trade does not of itself make him a professional. In order to become such he must either ride for cash or, being a trade man, race in competition on a track to which admission has been charged the spectators.

THAT CLEVELAND CONTRACT

Case Involving Kreamer and Earle Armstrong Is Aired Before the F. A. M. Convention Delegates.

THE much talked of Kreamer-Armstrong tangle, which resulted from the signing of a "hippodrome" contract at the Cleveland Motordrome, was given a thorough airing before the convention delegates at the Friday afternoon session. Chairman Thornley, of the Federation competition committee, stated the circumstances as they had been brought to his attention and Kreamer in turn put in a defense. Chairman Thornley referred to a copy of the contract which had been forwarded to him. It had been signed by Kreamer and Armstrong, the former presumably representing the track management, and stipulated that the Excelsior rider should not win any race on the Cleveland track by more than a machine length. Armstrong soon realized that he had made a mistake and opened up his machine in one of the events so that he won by a lap. The management took him to task for not living up to the "hippodrome" contract, an argument followed and Armstrong forwarded a full statement of the situation to the Excelsior factory. The Excelsior folks in turn placed the data in the hands of Chairman Thornley.

In presenting his defense Kreamer stated that he is innocent and contended that the chairman of the competition committee has been "persecuting" him for some time past in an effort to shut him out of the motorcycle racing game. Kreamer also stated that he was not the framer of the objectionable contract; that M. F. Bramley, the track manager, had prepared it and that when the time arrived to sign it Bramley instructed him (Kreamer) to sign it and then walked away. Kreamer explained that he did not regard the contract seriously and that in affixing his name to it he simply did so in the belief that it was too small a matter for Bramley to bother about. Kreamer testified that he was not connected with the Cleveland Motordrome officially and that he signed the contract because he had been ordered to do so by Bramley.

Chairman Thornley had no mercy on the race promoter, however. He raked Kreamer fore and aft with queries as to the management of the Cleveland track and other tracks with which he has been identified, and contended that the accused promoter should be dropped from the F. A. M. He summed up by charging Kreamer with entering into the "hippodrome" contract with Armstrong, owing money to several racers who rode for him at Los Angeles and defying the F. A. M. The disposition of the Cleveland Motordrome case was left with the Competition committee.

A CHECK FOR LORING.

WE have a check for Warren L. Loring in payment for luggage carrier design. A letter addressed to him at Bristol, Conn., was recently returned by the post office. If Mr. Loring will send us his present address, check will be forwarded at once.

THE Coffeyville (Kan.) Motorcycle Club has adopted the colors of the F. A. M. and has ordered pennants to read "C. M. C. 288."

READY FOR CYCLE PARTS CONVENTION

Committee Puts Finishing Touches on Fine Program for Detroit Sessions—Big Attendance Is Assured, Says Surre.

WITH plans practically complete for the second annual convention of the Cycle Parts Industries, to be held in Detroit August 6-9, there is every indication that the program will improve upon last year's excellent showing, from a business as well as a social viewpoint. Chairman W. J. Surre, of the general committee of arrangements, has set his usual lively pace in mapping out the three-day schedule and he is authority for the statement that those who attend will be given no opportunity to become "homesick." The official program is announced as follows:

TUESDAY, AUGUST 6.

Immediately upon arrival, the visitor is requested to register at the headquarters, which will be Parlor "E," located on the first floor of the Cadillac Hotel. There he will receive the official badge, and also tickets for the various entertainments planned during the week.

1 p. m.—Daylight sail on Lake St. Clair and the Detroit river on the steamer *Sappho*, chartered for the exclusive use of the party for the afternoon. This sail will give an opportunity of viewing both the American and Canadian sides of the lake and river.

8:30 p. m.—Theater party at the Temple theater. The management advises that they will have a very high-class vaudeville bill.

WEDNESDAY, AUGUST 7.

10 a. m.—Meeting of the Motorcycle Manufacturers Association; also meetings of the bowling and sight-seeing committees.

2:30 p. m.—Informal reception under the direction of the ladies' entertainment committee.

8 p. m.—Bowling contest at the Ponchartrain Bowling Alleys, which are located on Cadillac square, directly opposite the Ponchartrain Hotel. The committee has leased the eight alleys for the entire evening.

Two of the alleys will be reserved for the use of the ladies on this occasion.

THURSDAY, AUGUST 8.

10:30 a. m.—Meeting of the Cycle Parts and Accessories Association. Informal meeting of the jobbers.

3 p. m.—Visits to the various automobile factories under the direction of the sight-seeing committee.

FRIDAY, AUGUST 9.

10:30 a. m.—Joint meeting of the Cycle Parts and Accessories Association, Jobbers and Bicycle and Motorcycle Manufacturers.

3 p. m.—Seeing Detroit by auto.

The committee has arranged with one of the companies operating sight-seeing autos for a two-hour ride around the principal points of interest in Detroit, and also around Belle Isle, one of the principal pleasure resorts near Detroit.

As has been previously explained the official headquarters will be at the Hotel Cadillac, but Chairman Surre suggests that those who are unable to obtain accommodations there may be cared for satisfactorily at the Hotel Griswold or the Ponchartrain hotel, both located within easy reach of the Cadillac. The committee has had many replies from jobbers in all parts of the country to the effect that they will attend the convention, and it is worthy of note that

quite a few of them will be participating in the program for the first time.

The committees which have been at work for some time past on the arrangements are made up as follows:

Committee of Arrangements: W. J. Surre, chairman, Continental Rubber Works; D. B. Smith, Standard Co.; L. M. Wainwright, Diamond Chain & Mfg. Co.

Reception Committee: R. D. Webster, chairman, Eclipse Machine Co.; H. F. Mesinger, H. & F. Mesinger Co.; W. E. Eccles, Persons Mfg. Co.; W. C. Schweinert, Schrader & Sons; F. L. Waters, Chicago Handle Bar Co.; S. A. Falor, Goodyear Tire & Rubber Co.; Louis Schwab, Stevens & Co.; DeWitt Page, New Departure Mfg. Co.; A. C. Maternach, Standard Welding Co.; J. F. Cox, Pope Mfg. Co.

Bowling Committee: T. R. Palmer, chairman, Continental Rubber Works; Jos. F. Merkle, Miami Cycle & Mfg. Co.; M. C. Stokes, U. S. Tire Co.; John Brandt, Troxel Mfg. Co.; W. G. Schack, Emblem Mfg. Co.; E. C. Bowman, Corbin Screw Corp.

Sight-Seeing Committee: F. H. Harris, chairman, Diamond Rubber Co.; H. C. Tottman, Whitney Mfg. Co.; Thos. Heller, Atlas Ball Co.; W. Watterscheiet, A. R. Mosler & Co.

Ladies' Entertainment Committee: Mrs. F. I. Willis, Mrs. Keyser Fry, Mrs. W. J. Surre.

Press Committee: J. Leo Sauer, chairman, MOTORCYCLE ILLUSTRATED; W. D. Callender, *Motorcycling*; A. Eugene Bolles, *Bicycling World & Motorcycle Review*; W. A. Wahlgreen, *Motor Field & Cycling West*.

RODE FROM OREGON.

J. P. SCHANTIN, 41 Grand avenue, Oregon, is the F. A. M. member who toured the longest distance on his machine to the Columbus F. A. M. meet. He left his home town May 28, going south to San Diego, Calif., thence through Yuma and Phoenix, Ariz., to El Paso, Texas. He crossed the International Bridge and made a brief stop in Juarez, Mexico; thence north to Dodge City, Kansas, east through St. Louis and Indianapolis to the Convention City, Columbus, arriving Friday afternoon, July 19. Secretary-treasurer Gibson had the pleasure of a personal interview with Schantin and was much interested in perusing the F. A. M. log book which he used on his journey. He has a very complete collection of United States Postoffice post marks of the various towns and cities through which he toured. Mr. Schantin intends to continue his vacation tour east to New York City, and will return on his machine via Buffalo, Chicago and Milwaukee, intending to take the train there for his home. Schantin's machine is a Flying Merkel, 7-h. belt drive. Since leaving home, he has ridden 5,420 miles.

GEER WAS NABBED.

E. D. GEER is one of the unfortunates to fall into the speed trap set by the Cleveland chief of police. He got out by paying a fine of \$25 and upon his promise to sell his machine. These traps are being set about the city in numerous places.

ABOLISH TRADE RIDER CLASS

Beginning October First, There Will Be Only Two Classes of Competitors, Amateurs and Professionals—Chairman Thornley's Report.

NO sympathy was shown the so-called "trade rider" by the delegates to the Columbus F. A. M. National Assembly. With a unanimity that was quite remarkable the convention adopted Dr. Thornley's competition rules amendments providing for only two classes of competitors—professionals and amateurs. The new classification with numerous less important changes in the competition rules, becomes effective October 1, when, if not before, practically all of the present-day trade riders will become professionals. In the revised competition rules the three sections of Article 4 will read as follows:

"Section 1. Two classes of competitors shall be recognized—amateur and professional.

"Section 2. An amateur is one who has never received, directly or indirectly, since 1906 any compensation whatever for engaging in motorcycle competition or exhibitions, who has never knowingly competed in any sport against a professional or who has never sold or otherwise realized pecuniary benefit from a prize. Upon request of the chairman of the competition committee, or the referee of a contest, he shall furnish satisfactory sworn proof of his standing as an amateur.

"Section 3. A professional is one who has competed for cash, or who, since the adoption of these rules, and being connected either directly or indirectly with a person or firm that manufactures, assembles, sells or repairs motorcycles, motor vehicles or internal combustion engines, or operating them as a trade or profession, competes on tracks where the public is charged admission, or who has otherwise failed to observe the rules applied to an amateur."

Dr. Thornley was so pleased with the manner in which the delegates adopted his amendments that, several good objections having been advanced, he withdrew an amendment, the purpose of which was to confine amateurs to racing outside a certain radius of their homes. The sub-committee of the special committee appointed last year to revise the rules reported, through Mr. Sauer, that the rules had been revised throughout, but that it had been impossible to get action by the entire committee. Mr. Sauer moved that the old committee be discharged and a new one of three appointed to whip the revised rules into shape at once for printing. This motion having been adopted, the chairman appointed Mr. Sauer, Dr. Thornley and John O'Connor as members of the committee.

PROPOSE ENGLISH ALLIANCE.

The question of joining hands with the English motorcycle federation, the Auto Cycle Union, of England, was discussed at the convention and met with much favor. Mr. Wells, who represented the Auto Cycle Union, suggested that the F. A. M. enter into an alliance with the British organization for their mutual benefit. The matter was placed in the hands of Dr. Thornley, of the competition committee, and the F. A. M. board of directors.

The affiliation will no doubt be brought about long before the next national convention of the F. A. M. The two most obvious

benefits which the F. A. M. would derive from the affiliation, as pointed out by Mr. Wells at the convention, would be, first, a mutual recognition of racing records, making genuine "world's records" possible, and, secondly, it would give F. A. M. members all the privileges and rights of the members of the Auto Cycle Union when touring or racing in Europe, and the members of the Auto Cycle Union would be treated in a reciprocal manner when in the United States.

Mr. Wells, in his talk before the convention, stated that the Auto Cycle Union during the past year had honored over 300 American motorcyclists with membership privileges when touring abroad. This was done without the knowledge of the F. A. M. and in recognition the assembly honored the Union with a vote of thanks.

Two important resolutions in regard to board tracks and board-track racing were adopted. The first has to do with the exclusive franchises, and the other deals with the use of the money obtained from fines placed on professional riders for violations of the rules.

In the future all money collected from pro-

fessionals in fines will be placed in a separate fund, which will be used as relief money for professional riders who are injured while racing, and the amount of money which is to be given the rider or the rider's family in time of need is to be decided by the F. A. M. board of directors. It was moved to place \$500 into this relief fund at once. The resolution establishing the relief fund, which was fathered by Chairman Thornley, also provides for the acceptance of voluntary subscriptions.

The matter of giving exclusive franchises for board tracks in any city for more than one year was favorably acted upon, and the Federation decided that an exclusive franchise may be given for a period of from one to five years, and that after the first year the annual fee shall be reduced each year, the percentage of reduction to be decided upon.

Two professionals were reinstated into the amateur class. They are Messrs. Wilson, of Los Angeles, and T. K. Hastings, of Brooklyn, N. Y.

Hastings' case was presented before the assembly by Howard French, of Baltimore, Md. Charles Fuller Gates, of Los Angeles, championed the caused of Wilson.

CHAIRMAN THORNLEY'S ANNUAL REPORT.

IT gives me great pleasure to inform you that the Competition Committee during the past year has been in a most flourishing condition from a financial standpoint. Elsewhere a report of the Auditor, who has gone over all my books, vouchers, correspondence and sanctions, and made a most thorough investigation, will, I hope, be read to you.

SYNOPSIS OF FINANCIAL REPORT.

On the 1st of July, 1911, I had a balance of four hundred and eighty-one dollars and sixty-nine cents, \$190.77 representing prize money for amateurs held in trust..... \$481.69

During the year I received—

For prizes for amateurs to be expended in the buying of suitable prizes.....	966.50
From miscellaneous sources	1,240.56
From the Treasurer	1,472.75
For sanctions	4,345.00

Making a total that came into my keeping of.....\$8,506.50

I expended—

For office supplies	\$237.95
For stenographer, heat, rent and light....	1,695.00
I refunded	93.00
I forwarded to Dr. Gibson, the Treasurer....	2,340.64

Under the head of Miscellaneous Expenditures, most of this money passing through my hands without stop

2,318.94	
I paid out on bills for suitable prizes won by amateurs out of money held for them in trust	838.47

Making a total expenditure of.....	7,524.00
Leaving a balance of.....	982.50

And in accordance with the rule of the office, on the 10th day of July I sent \$463.70 to Dr. Gibson as an excess over \$200 bank account, and \$518.80 held in trust for prizes.

SUGGESTS A SALARY.

In passing, I should like to say that the work of the Chairman of the Competition Committee is such that I do not care how much you reduce it to system, the mental strain is exceedingly great and the detail work will keep at least two stenographers busy the year round, with extra ones during the summer. It requires my constant personal attention, time and patience, and it has received the benefit of whatever ability I possess. It is not work that will run itself, and the mental work involved is exceedingly trying. I do not hesitate to say that it is work that should be well paid for. The Chairman of the Competition Committee should have a handsome salary to compensate him for the energy, time and ability he will be forced to expend upon the work to keep it up to the successful mark which it has reached today. Some of you may think that I am trying to ask for

a salary for myself if I am Chairman next year, and that is just exactly what I am doing; for whoever is Chairman of the Competition Committee next year should be well paid for his time and ability.

POPULARITY OF RACING.

Racing has increased enormously, and with the building of board tracks it will continue to increase. The establishment of a system of having formal applications for sanctions, blanks for Referee's reports and specimen entry blanks has made the issuing of sanctions on an intelligent basis very much easier and has helped promoters to start out in the right direction. The payment of the Referees by the F. A. M. has increased the efficiency of these officials several hundred per cent. As they do not get paid by us until they file their report, you can rest assured that the reports have been coming in with splendid regularity.

THE GOOD AND THE OTHERS.

"Rome was not built in a day," neither will motorcycle racing become the perfect sport it should be all at once. The Government of this country has prisons in which it can confine crooked men, and in spite of the fact that there are a lot of them out of jail who should be in. The Federation of American Motorcyclists has no jail in which it can confine its crooked sports, tin-horn gamblers and short card artists. Our most severe punishments are far too mild for some of the gentlemen these punishments should reach. Some people are even so foolish as to claim that the culprit may have fallen under my personal displeasure. I wish it distinctly understood right here that I would not dignify a man I believed to be crooked with any personal feeling one way or the other. I simply do not wish to have any transactions with him and feel that where I believe a man to be crooked I should be unfaithful to the trust that you gentlemen have placed in me by having any dealings with him whatever.

SCARCITY OF RIDERS.

Since last year a number of board tracks have been built and are now in operation. Unfortunately, in my opinion, tracks have increased in numbers faster than the riders have. Moreover, board track builders and promoters have found it difficult to obtain suitable machines for racing purposes. The inevitable result has been more or less exhibition riding.

ABOUT RUNAWAY RACES.

Another point: If, for example, a track had six events, a factory could send down a machine which would clean up in every one of these events with a runaway exhibition and then some other factory would do the same stunt at the next meet. The result would be that the track management would either have to shut down, because the public would not come, or, using the F. A. M. as a club, would

drive the track owners to the various manufacturers on their knees, begging for racing machines. The men who have expended money on board tracks would see their investment go up in the smoke of the machines advertising the manufacturer who had never spent one cent upon the building or running of the track. I leave it to you if this is a fair proposition, and if I have not been justified in trying to prevent such an injustice being perpetrated upon track owners. Aside from the justice or injustice of the thing, it is something which the F. A. M. could not continue to do indefinitely—for, if we attempted to force such runaway exhibitions upon track owners, they would very soon tell us to go to the mischief, and form an association of their own, exchange riders and machines and have a central repair shop where they could tune up stock motors to very nearly the same efficiency as the manufacturers could themselves.

RESTRICTIVE AGREEMENTS.

During the winter there seemed to be such a demand for F. A. M. protection for the heavy investment which was required to put on board tracks that the Board of Directors very wisely, decided to issue a so-called "restrictive agreement," which, in many ways, takes the place of what is known as a franchise in the sport of bicycling. This restrictive agreement, in a few words, is a contract made by the F. A. M. with the board track promoters to the effect that the F. A. M. will not grant a sanction within a radius of 25 miles to any other board track than the one with which this agreement is made. The track management on their part agree to run all motorcycle races under the sanction and in accordance with the rules of the F. A. M., and further agree to pay certain sums of money proportionate to the population of the town or city in which or near which the track may be located.

As this was something of an experiment, the Board of Directors decided not to enter into any contract with any track at that time for a longer period than a year, believing that so important a matter as entering into a contract of this nature for a longer period should be left to the decision of you gentlemen. Three of the new board tracks snapped at this agreement at once, the Chicago track and the Philadelphia track paying \$1,500, or \$750 each, and the Newark track paying \$250—in all, \$1,750.

It is understood that the Chairman of the Competition Committee should be only the collecting agent for these fees and that the money should not remain in his hands after the final agreement is signed. This was done at my request, as I was exceedingly anxious to have this money go into the national treasury direct and not figure as any part of my receipts.

As soon as the contracts were finally signed by the track owners this money was promptly turned over to Dr. Gibson; of this amount \$750 only figures in my books, because Mr. Johnson sent a check for \$1,000, \$250 of which was to be delivered to Wolters for his special prize, and as the check was made payable to me personally, it had to go through my books, but only figures in miscellaneous receipts and expenditures. Therefore, I believe that in justice to this department that \$1,750 should be considered part of the contribution of the Competition Committee towards the National Treasury. As I have turned over to Dr. Gibson in addition some \$900, this would mean that the Competition Committee has contributed to the National Treasury nearly \$3,000 over and above expenses.

LONGER TERMS RECOMMENDED.

I should like to recommend to the Federation that they continue to issue these restrictive agreements, but with some slight alterations. While protection for the first year is of the utmost importance to the board track operator, nevertheless it would be to his advantage to have a longer period during which he could be assured of protection.

My opinion in the matter is that we should issue restrictive agreements for 3 or 5 years, that the charges for the first year, when the protection is greatest, should remain the same, but thereafter the yearly charge for restrictive agreement, or so-called franchise, should be a percentage of the original charge, payable yearly in advance. The wisdom of issuing these restrictive agreements has been more than justified. After the success of the Chicago track last year, promoters seemed to be frantic to put up board tracks wherever it was possible to get enough money to build them, in spite of the warning that I repeatedly gave them that even though they could get the public to patronize two or more tracks in any given community, it would be impossible at the present time to supply a large number of tracks with riders.

Had it not been for the restrictive agreement there would undoubtedly have been two tracks in Chicago, and I do not believe that either of them would have been able to obtain enough riders to keep the Chicago public interested.

THOSE PRIZE MONEYS.

In the matter of prizes, it gives me great pleasure to announce that since the establishment of the ruling that prizes must be in the hands of the Referee before the meet is allowed to start and that they should be delivered to the riders immediately after the races were over and before they left the track, I have had very few complaints in the matter of the delivery of prizes. Moreover, the Referee is required to state in his report as to whether the prizes have been delivered or not, and, if not, why not.

During the past year, I have, as Chairman of the Competition Committee, held some \$1,100 for so-called amateurs, almost invariably trade riders who

have won prizes around the city of New York. I originally started to hold this money for the riders, because they were getting most unmercifully "done" by promoters. Fictitious values were ascribed to prizes, and when they were delivered they were so poor that the riders were "kicking" all the time. As long as we have a classification for trade riders I feel that I have done the right thing by seeing that the agreement between the promoters and the riders was carried out to the letter, but I do not hesitate to say that I consider the whole thing very bad in principle. I believe that true amateurs should race for medals and cups, and that these trade riders who have been riding for cash values and the money turned in to me are professionals at heart. While they have bought things of which I have approved (and, in a measure I may be said to have aided and abetted them in it), I feel that I acted under the rules as they exist today. Nevertheless, I do not hesitate to say that I consider the rules wrong and that most of these men are professionals in everything but name, and should be in the professional class. At any rate, if I remain in charge of the Competition Committee, I do not propose to continue this practice any longer. I hope that the Convention will pass such a classification of competitors that will eliminate this very reprehensible practice of so-called amateurs riding for almost everything in sight, from an inner tube up to a house and lot.

RESPECT FOR AUTHORITY.

To the competitors themselves, I wish to express my appreciation of their respect for authority. When you get a crowd of men together, you will always find a certain number who want to "put something across" all the time. I do not believe that all of these men are utterly bad, but that they try to cheat the F. A. M. and the Competition Committee with as little conscience as the average man or woman who goes to Europe and tries to smuggle in something that is dutiable, and consider it part of the game. There are a few, however, who simply cannot be straight—they don't know how—they would rather go round the corner than across the street at any time. These men should be, as far as possible, eliminated as soon as definite proof can be obtained of their crookedness. I believe, however, that most of my suspensions during the past year have erred on the side of leniency rather than that of severity.

PRAISES REFEREES.

Another class of men to whom I wish to pay my respects are the official referees. They have done good work, faithfully and conscientiously, in the face of criticism and abuse, and for a long time without any remuneration whatever, and only recently with remuneration that could be considered any inducement at all. I have attempted, wherever I could find a man who would attend to the business, to put racing in charge of State referees who would have the power to issue sanctions, recommend to me local referees for appointment, collect fees, and, in fact, perform all the duties of the Chairman of the Competition Committee in a given State under my supervision. Inasmuch as I was not in a position to offer these men a salary it has been exceedingly difficult to get men who would attend to the work. Moreover, I would frequently be called upon in a hurry to issue a sanction on short notice and it would be impossible to act through the State referee. Then the State referee would feel hurt. These are all matters that it will take time to adjust, and when you remember that for six months in the year in most parts of the country there is no racing and then it starts with a jump and keeps up at a furious pace for a month or two and then subsides, you can readily see that referees get out of the way of doing things during the idle months; then about the time when I get things working nicely and smoothly, racing is all over for the season. Of course, if I could keep the same men in harness year after year, by slow degrees we would get a splendid corps of officials all over the country.

CHARLES FULLER GATES.

The most striking example of this outrageous treatment of a loyal and hard working official is the case of Mr. Chas. Fuller Gates, of Los Angeles, Cal. When I took charge of the Competition Committee several years ago, Mr. Gates was the referee in Los Angeles. I had not been in office very long before there was a storm of complaints coming in. The burden of the song was about the same excuse that the average woman gives for not marrying some given man, viz., that she doesn't like him. This seemed to be the trouble with people in Los Angeles—they personally did not like Mr. Gates, probably for the reason that Mr. Gates did not go around continually licking the blacking off their boots, but, on the contrary, insisted that things should be run in accordance with his ideas of how they ought to be run. Instead of accepting his rulings and showing him the respect to which his position entitled him, they were continually fighting him, and I have not a doubt in the world that Mr. Gates finally fought back.

THE HANDICAPPING PROBLEM.

Numerous schemes for handicapping motorcycle races have been discussed during the past year and some of them tried out. I believe that the time is at hand when handicappers will have to be appointed for each board track and allowed a fee collected from the riders for each race they handicap, as in the old bicycle days. Where the same machines are used day after day on a board track, the difference in their speed can be fairly accurately determined. As

it is almost imperative to have flying starts on board tracks, the only way that handicapping can be satisfactorily done at the present time would be to make the distance so great that the scratch machine would have to lap its competitor. This is all right for two machines, but when you put three or four machines, all with different handicaps, on a board track, the problem becomes exceedingly difficult and almost impossible of solution.

It has occurred to me that on board tracks where the same machines were being used day after day, it might be possible to so change the gear of a machine as to either reduce or increase its speed so that all of the machines used on a given track would be of very nearly the same speed. If then the management would not allow a rider to have the same machine day after day, thus winning all the prizes, but instead would at the beginning of each meet have the riders draw lots for the machine they were to ride for that meet, I think we could have some real sport. It seems to me, too, that the manufacturers could get some honest advertising by having match races between the crack riders and the crack machines of different factories. For instance, a board track promoter could put on and advertise a special match race between the crack riders and the crack machines of the prominent racing manufacturers in the country, provided, of course, the manufacturers would sign a contract to fulfill their part of the program, viz., to furnish the rider and the machine.

In conclusion, I wish to express my appreciation of your kind attention to this rather lengthy report and to caution you that if you wish to have racing improve in the future as it has improved in the past, and to have the F. A. M. respected and admired, you must be exceedingly careful whom you elect for President and for your Board of Directors, because the appointment of the Chairman of the Competition Committee is entirely in the hands of the President and the Board.

COAST TO COAST.

NO participants in the Northeastern tour, or any of the tours for that matter, attracted more attention or caused more comment than M. E. and Mrs. Gale, of Angola, N. Y. Gale and his wife, on a 7 h. V belt-driven Emblem, left Angola Monday, the 15th inst., for Columbus, which town they reached on time with the other Northeastern tourists. At the conclusion of the meet they started for Indianapolis and Chicago. From the Western metropolis they will travel by way of Omaha, Kansas City, Denver and Colorado Springs to Los Angeles. Having reached the coast it is Gale's purpose to make an effort, in which he is confident he will be successful, to break all transcontinental records.

Aside from the fact that Gale is carrying an extra passenger, his trip is a notable one in that he is using a special contrivance in the form of a double seat astride the center of the machine. It is neither a tandem attachment nor a sidecar, but a combination of both. It looks odd, but both Gale and Mrs. Gale declare it to be perfectly comfortable and safe. They had no trouble whatever in keeping up with and even setting the pace for the other riders in the Northeastern tour, and they expect no trouble in reaching the coast and in making the return trip in record time.

PACIFIC COAST MEET IN 1915?

THE F. A. M. convention went on record as endorsing the plan to hold its national race meet and convention in California in the year 1915, when a World's Fair will be held in San Francisco. Charles Fuller Gates, of Los Angeles, made the proposal to sound out the delegates. Of course the matter is left entirely to the decision of the Board of Directors. According to Mr. Gates, there are several cities in California which want big conventions in 1915 and that it is their intention to let each city have at least one bite. He said that the main convention business could be carried on at Los Angeles, where a day or more of racing could be held on the motordrome, when the convention could pack up its grips and move on to at least two other neighboring coast cities.

LA SALLE'S REPORT.

(Continued from page 27.)

suggested some minor changes, but owing to important National duties was unable to make the necessary changes and do the other work, such as making new copies, etc., so the bill was returned. Boyd had given a good deal of gratuitous service—we didn't feel justified in driving a willing horse to death, so the matter ended there for the time.

A Remedy: Keep the districts. Have a District Law Committee, each member of which is chairman of his State Committee, the District Committee to have supervision over legal matters in its district, under the district vice-president. This will give the committee a territory of reasonable size, so that the committee will not go blind looking for the horizon that bounds the field of its activities. When a law is needed, as in New York, let the State Committee have the matter in charge, and see to it that that committee does its work. If in need of help, it might be that the District Committee would be of aid. With legislation secured in New York, it stands pat that the New York member of the district would have some points helpful to the rest of the committee, when needed.

Local Attorneys: Through the help of local commissioners in the cities and large towns, attorneys should be secured as follows: In case a member is arrested and investigation by the local attorney or the local commissioner, or evidence of the accused, shows that he has violated no provisions of law, the attorney defends the case. If he wins he is to receive the actual costs of the action from the F. A. M., and a moderate fee—established by the National Law Committee—from the defendant. If he loses, he gets no fee, but his costs are paid by the Federation. Legal minds may suggest improvements on this plan, but it stands as a suggestion worthy of consideration.

It should be easy to get the local commissioners to call on the right hotels in their town, get the rates reduced to members when possible—have them sent to the district vice-president, and when the list of his district was complete, he would send it to the National Tours and Hotels Committee.

Routes and maps: There should be through every district a main trunk route—in the Atlantic District, from its southern end via Washington, D. C., through Baltimore, Philadelphia, New York, Albany, Syracuse, Rochester, Buffalo and Erie to the western district limit. The plan: Let the Atlantic vice-president, for example, announce that August 24 next will be Atlantic Tour Day. Beginning at the southernmost affiliated club center, as Washington, go to the next club town north. A man appointed by the president of the Washington club will keep a record of distances, road conditions and so on, and send it in to district headquarters at once. The club to whose town Washington rode will have gone to its next club neighbor to the north in the same way. In New York State, Syracuse will go to Geneva, Geneva to Rochester, Rochester to Batavia and Batavia to Buffalo. Buffalo will go to Erie, and Erie to the end of Pennsylvania. Lying to the south of the trunk in New York, Cortland will go to Syracuse, and Ithaca to Auburn, while in the same way Elmira will go to Geneva or Rochester, and these side routes will be keyed onto the main line. It is important that road conditions be given in a motorcycle tour book. No rider can lay out an itinerary within hours, for a long ride, without this knowledge. The announcement of a District Tour Day, properly spread in the press, would get up a popular interest of value to the cause and would, we are sure, do much to stimulate club interest in touring.

With the Atlantic District—or any other district—data complete, it should be turned over by the District Tours Committee, which will correct it and forward it to the National Tours Committee, to get it into book form as soon as possible. Blank pages may be left in the book for the insertion of new routes, as they are published in the motorcycle press, and at the end of the year this matter may be printed and furnished the members in good standing to be pasted in place.

The National Tours Committee could see that there were no discrepancies at junction points of districts; see that proper sketches of routes are made from standard maps; get the matter all ready for printing and turn the copy over to our secretary for printing. Buying the paper in quantity at wholesale, getting competitive bids for the printing, should get the price of the list of hotels, shops, attorneys, clubs, commissioners, in principal towns and the road information down to a figure possible for us to work on. And the list itself, together with the benefits—which we should have, anyway—would be an effective answer to any question about the need of every rider being with us.

Someone says: "That's a lot of work for one poor district vice-president to do," and I answer, "Yes." No one man can do justice to his job alone, do all the work himself, and have time for anything else. One of our officers suggested to me that it should be feasible to give a per capita of 25 cents per member to a State Commissioner to defray the expenses of his office. Why not apply this plan to the district executive? There is a lot of State work that falls to the Vice-President. He is responsible for his district, he has to keep his hands on the reins at all times. Given a district head who isn't afraid of work; pay him 25 cents per member, new or renew, let him hire some one to do the work while he plans and writes the necessary letters, and we shall have no difficulty getting men of caliber to fill the district offices, who will deliver the goods.

Eliminate the districts, as has been proposed, let the appointment of all State Commissioners lie with one man, with 48 chances of picking inefficient, let

that man be one who wants to use the National presidency as a source of income, let him pick his lieutenants with selfish ends in view, and you have a picture of the possibilities of a condition that has wrecked more than one apparently husky organization. I have one in mind, of recent date, which failed as above.

Again, to do all the work of a real National executive predicates an office outfit of files, more than one stenographer and typist, and demands on the time of any man who has anything in the way of real business, which it would be hard for him to meet. There would be the added expense of the rent of an office, probably, and the duplication of files, card records, etc., now in the district offices. The district plan permits a closeness of acquaintance between the district head and his helpers, impossible with the one-head plan; it stimulates a friendly rivalry between the various districts that is of benefit to the entire body, and it prevents, in a measure, those political combinations which, carried too far, spell ruin for the most healthful organization.

After a long membership in this body we believe that there has never been a time when the various department heads have worked more conscientiously than at present. But we have seen indications that the work of some of the officers has lapped over that of others with added expense. The same thing has featured in big businesses. And notwithstanding that the various departments of these big plants were capably officered, it was taken as no aspersion on the department heads' ability that the services of efficiency experts were employed. The importance of little leaks, small unnecessary expenditures here and there, unneeded movements that hamper the general effectiveness of the whole establishment, and cutting down its output—all these were deemed worthy of study and removal. We believe that no officer of this organization would object if the President elects and the Board of Directors constitutes an efficiency commission, and with a view to increasing our efficiency seek to lay out the work of our various heads so that the most effective work may be done. We believe that much might be accomplished if this were made the first work of our new administration. If it be considered desirable we can furnish a few suggestions looking to improvement along the lines suggested.

There is much we would add to this paper, but fear it already has reached a tiresome length, although we have striven to include only necessary matter. The imperative need for modernizing some of our methods must be very apparent to him who ponders. The day of big things is here. Motorcycling is no longer a sport. The motorcycle has taken its place as a mighty industrial and economical factor. Its users are entitled to every reasonable right and privilege, and it is our duty to see that we live up to our opportunity, and see that our riders receive their due.

AT THE MIAMI PLANT.

AMONG recent visitors at the plant of the Miami Cycle & Manufacturing Company, in Middletown, Ohio, were the riders who appear in the accompanying photograph.



From left to right they are: L. L. Parker, who toured from Denver to the Columbus convention, with his wife occupying the tandem seat; G. H. Snyder, Flying Merkel agent in South Bend, Ind.; Elmer E. Smith, Merkel agent in Richmond, Ind.; John Merz, agent for the Miami machines in Indianapolis; O. Weed, of Indianapolis, and a racing man from Bluffton, Ind., who neglected to place his name on the company's register.

A DUCKWORTH ADDITION.

THE Duckworth Chain & Manufacturing Company, of Springfield, Mass., has been doing business at high tension all season. A material increase in its motorcycle chain business has necessitated provision for larger manufacturing accommodations. Accordingly, within two weeks, work will be started on an extensive addition which the company hopes to complete by early fall.

HUMAN COMETS AT PHILLY

Machines Ridden by Vanderbery and Pancoast Catch Fire as They Spin Point Breeze Bowl.

PHILADELPHIA, Pa., July 13.—In the three-mile race this afternoon Vanderbery, who had ridden a sensational race, had his machine catch fire. When the mishap occurred Van was at the top of the saucer. There was a scream of warning from the spectators and in the next instant the rider swerved his machine downward into the enclosure and fell. He was slightly bruised. His machine was immediately pulled into the swamp surrounding the track and the blaze was smothered. A similar mishap occurred to Pancoast.

In the Class B event Thomas beat Klebes; Hollenback third. In the Class D event Pratt, on an Indian, was first, with Pancoast, Emblem, second, and Gable, Curtis, third. The Class C was won by Hollenback, followed by Veditz; Vanderbery third.

Evening Races.—The first race of the evening was a thrilling affair with five star riders entered. The winner of this event, the first heat of Class B, was Klebes; Thomas, second; Hollenback, third; time, 2:55½. In the final heat of Class B Klebes broke his countershaft. Thomas was second, with Hollenback third; time, 2:20½.

The second Class D race had three riders entered. It was in this race that Pancoast's Emblem caught fire, leaving only two contestants to run the race. The winner was Pratt. The time was 2:35. The final heat of this race was a runaway for Gable.

The Class C event was an exciting race. It was in this event that Vanderbery's machine caught fire, putting him out of the race and leaving Hollenback and Veditz. The race was put off until later in the evening, when Hollenback finished first, Veditz second, Vanderbery third. The time for the first heat was 3:10½. In the final of this event Hollenback won. He suddenly developed a fast streak and passed Veditz in the last mile, winning by over two lengths.

The races on Tuesday evening before one of the largest crowds so far seen at the motordrome were well contested. A special match race between "Speedy" Vanderbery and Frankford Veditz proved very interesting. The event was won by Vanderbery. This is the second time that Vanderbery has defeated Veditz. H. H. Thomas made an effort to break the track record for five miles but failed.

In the 7-mile professional Class B event there were five entrants, Klebes, Thomas, Veditz, Vanderbery and Hollenback. Thomas forged in the front and he and Klebes ran neck and neck almost throughout the four miles, with Hollenback just enough to the rear to come in for the third prize. In the second and final heat of this event the start found Klebes at the pole, with Thomas closely following. In the second mile Thomas' machine broke an exhaust valve, leaving Hollenback to fight it out for second place, closely followed by Veditz and Vanderbery.

The 6-mile professional Class D event was one of the best races of the evening. The entrants were Gable on the Curtiss; Pancoast, Emblem, and Pratt on an Indian. Pancoast was leading by a good margin when his machine suddenly ran hot. Gable then made a runaway of it.



ONE of the entertainment features in connection with the Columbus meet was the banquet rendered by the Meet Club at the Hotel Virginia to F. A. M. officials and motorcycle and accessory manufacturers. There were about one hundred and fifty present, Mayor Karb presiding. Brief addresses were made and stories told by President Hamilton, President-Elect Patterson, Chairman Thornley, of the Competition Committee; Director F. I. Willis, President A. B. Coffman, of the Motorcycle Manufacturers' Association, and "Pop" Johnson, of the Chicago Riverview Motordrome.

PARADE AND BARBECUE.

'Mid showers of souvenirs from the upper stories of the Hotel Virginia, where the headquarters of a number of the manufacturers were located, a procession of 400 motorcyclists set out for a parade of the streets of Columbus at noon on Thursday, July 18, which was to terminate at Olentangy Park for a big barbecue. The wildest sort of a scramble took place as the officials were endeavoring to line up the riders for the parade, when the Yale representatives began tossing valuable leather pocketbooks from their windows on the fourth floor. Bedlam reigned and traffic on the main street was completely blocked until policemen put a stop to the fun. Another chase took place when Goodyear Tire men appeared on the scene with large white parasols bearing the name of that well-known tire brand. In the scramble for these prizes a number of machines were knocked over and it was not until the last "sunshade" had been disposed of that the riders really lined up.

A short tour of the stone-paved streets was then undertaken, the processionists, in the majority of cases, bearing a resemblance to war-painted Indians or wild Zulu chiefs, with their many pennants and badges dangling from every angle of their machines.

At the park, which is located on the banks of the Olentangy river, the F. A. M. boys indulged in looping-the-loop and other sensations which, after their tempestuous touring, seemed of a mild order. The tables, spread under the large trees, were securely roped off until a call was made at 1 o'clock for "eats." Large slices of meat were cut off the big roasting carcasses and the feed assumed the "serve-self" style without invita-

tion. Barrels of potato salad, cauldrons of soup and kegs of pickles were all divided up in no time, and, for the most part, the visitors hied themselves to the bank of the stream with their wooden plates.

The affair became a genuine picnic, and after the feed preparations were made for the playing of different games. Interest was chiefly centered around a long thick rope which happened to be conveniently coiled close by. Young and old took part in impromptu tugs of war while the ladies looked on. A piece of the rope was thrown over the limb of a tree and climbing stunts were next in order, several, including Arthur Davidson, showing considerable aptitude in the hand-over-hand work. The barbecue was one of the most enthusiastic events of the Columbus gathering, the delegates getting considerable pleasure out of the occasion.

THE BIG SMOKER.

THE weather man was against the Columbus boys on Wednesday night when the smoker was held at the motordrome. It rained in the afternoon, and although it cleared up in the evening, the ground surrounding the board track was so muddy that it was unpleasant to tramp upon. Rain threatened in the evening, but despite that fact probably a thousand or more enthusiasts attended the smoker. A good boxing card featured the evening's entertainment. Some of the racers got out their machines and spun off a few miles at a fast gait on the boards, to the great delight of many visitors who had never seen board track riding before. A band furnished music during the evening, and the program was ended with a big "feed" on the grounds.

IN his talk favoring an alliance between the A. C. U. of England and the F. A. M. Mr. Wells brought out the fact that during the past ten or twelve months three hundred American riders have toured in England and have been extended the courtesies of the English organization.

THE TRADE AT COLUMBUS.

AMONG the concerns having exhibits in Columbus during the F. A. M. week, in addition to those mentioned elsewhere, were the Harley-Davidson Motor Company, at the Hartman; the Flying Merkel, at the Southern; the Flanders, at the Chittenden, and the Indian and Thor at the Virginia. Ben Howard was in charge of the Flanders exhibit, while Frank Valiant took excellent care of Flying Merkel riders and many others at the Southern. Incidentally, Valiant had programmed a smoker, which eighty-two Merkel dealers and riders enjoyed at the Southern Friday night after the races. Mr. Valiant was toastmaster.

Valiant remarked to a representative of MOTORCYCLE ILLUSTRATED that never before had so much business been done at an F. A. M. meet. He sold a carload of 1913 machines, assorted models, to the Toledo Sporting Goods Company, of Toledo, and another carload to Newby Brothers, of Kansas City. He also established four new Merkel agencies.

Angsten-Koch Company, represented by Henry and J. P. Angsten, were among those who exhibited at the Virginia, as did also the Eclipse Machine Company, represented by Sales Manager Ferguson and Northeastern Tourmaster and Eclipse Coaster Brake and Clutch Designer Ellett.

Dick and Jack Purdy were on hand the better part of the week, talking and demonstrating the efficiency of the Purdy exhaust whistle and incidentally announcing that they would soon have in readiness for the 1913 market an entirely new model of the chime type.

Representing some two score other manufacturers of machines, parts and accessories, were the following:

The Atlas Specialty Mfg. Company, Mr. Wallheim.

Troxel Mfg. Company, J. W. Brandt and "Heiney" Roberts.

Heitger Carbureter Company, President Heitger.

Emblem Mfg. Company, W. G. Schack and Columbus Agent Taylor.

Miami Cycle & Mfg. Company, Assistant Sales Manager Valiant, J. W. Ash and Designer Joe Merkel.

Hendee Mfg. Company, Messrs. Hedstrom, Weschler, Wells, Buffum, Hunt and Whitney, of the Chicago branch.

Bosch Magneto Company, Al. Bartsch.

Triumph Mfg. Company, George Sherman.
Harley-Davidson Motor Company, Arthur
and Bill Davidson and Assistant Sales Man-
ager Rogers.

Fowler-Carnes Company, I. F. Wilson.

Aurora Automatic Machinery Company, E.
J. Knight.

Beckley-Ralston Company, J. L. Donovan.

Ball Finch Company, of Newark, Ohio,
which is about to move its factory to Colum-
bus, was represented by Manager Neff.

New Era Autocycle Company, Messrs. Ma-
son and McCullom.

Consolidated Mfg. Company, A. B. Coffman,
George Squier and Jesse Campbell.

Excelsior Motor Supply & Mfg. Company,
Sales Manager H. N. Kirk, Aleck Whitfield
and Frank Schwinn.

Wheeler & Schebler, Messrs. Briggs and
Oakley.

Goodyear Tire & Rubber Company, Falor
Bros., Messrs. Hemington, Samuels and Cam-
eron.

Federal Rubber Company, A. J. Zealley, J.
A. Barclay and A. L. DeVault.

Continental Rubber Works, W. J. Surre and
R. E. Sisson.

Diamond Rubber Company, Messrs. Harris
& Ziesloff.

United States Tire Company, Warren O.
Seelye, J. B. Webb and Clarence Welch.

Empire Tire Company, Branch Manager
Gibson, of Indianapolis, and Walter Kallmeir.
Indiana Lamp Company, Mr. Thoms.

Representing the Standard Welding Com-
pany, of Cleveland, were Messrs. J. C. Matter-
nach, B. G. L. Dodge, Bert Quayle and Fred
Wilhelmy. Mr. Matternach announced that
the Standard Welding Company is now
ready to deliver rims in accordance with the
new specifications. The factory facilities have
recently been increased in anticipation of a
much greater demand than that of last year.
Samples may now be had by manufacturers
upon request.

Wherever, in Columbus during the past
week, manufacturers, dealers or riders were
likely to congregate, Corbin coaster brake lit-
erature and Corbin "steel-shaving" cigars
were always in evidence. It is almost un-
necessary to explain why. The ubiquitous A.
H. Harrop was the reason.

Smiling Dave Smith, whose fame for good
fellowship extends from coast to coast, was
present all the week in behalf of the Standard
Company and the Splitdorf Electrical Mfg.
Company. Mr. Smith announced that 1913
models of the Splitdorf magneto would be
of the armored type and that the company
would be ready to make deliveries about
Dec. 1.

M. B. Sullivan, who has been connected
with the Splitdorf company for many years,
rode his machine, fitted with a Splitdorf mag-
neto, from New York to Columbus with the
Northwestern tourists and reported an entire
absence of ignition troubles.

Other motorcycles represented were the
Henderson by Vice-President Henderson;
R.-S., by W. F. Remppis; Minneapolis, by
Harold Turner; the new Dayton, by President
Lester and Sales Manager H. M. Huffman,
of the Davis Sewing Machine Company, and
the Pilot by Al. Oberwegner, of the Oberweg-
ner Motor Company.

Hawthorne Mfg. Company, manufacturers
of "Old Sol" lamps, Thomas M. Dunham.

Kokomo Rubber Company, Lon Spraker.
Persons Mfg. Company, W. E. Eccles.

HEARD in the CROWD

AN ocean-to-ocean relay race proposal was
made before the national F. A. M. con-
vention in Columbus by Dr. Patterson last
week. All that Dr. Patterson asked the as-
sembly to do was to put its stamp of approval
upon the scheme.

The idea is to see how fast a message can
be carried from coast to coast by means of
the motorcycle. It is planned to have three
men start with a message from Los Angeles.
The original three men will carry the message
for perhaps 200 miles or more, when they
will be relieved by three other men, who will
make the second leg of the journey. The second
set of riders will be relieved by a third,
and so on until the final relay carries the mes-
sage into New York City.

There were seven delegates from Roches-
ter, N. Y., who made themselves conspicuous
by wearing loud green "lids" at the conven-
tion. The "wearers of the green" were J. A.
Oaks, W. A. Fisher, A. Strobel, G. P. Stroger,
H. Dublin, F. Dublin and G. J. Wagner. Wag-
ner played an important role in the conven-
tion.

President Hamilton was "impeached" from
his chair for a time Saturday morning while
Howard French took the gavel. The "im-
peachment" came at the request of Dr. Thorn-
ley. Just as soon as Mr. French had taken
the chair Dr. Thornley offered a resolution
providing for an appropriation of \$95 for a
gold watch, which was later presented to Mr.
Hamilton in appreciation of his services as
president of the F. A. M.

The watch was passed around the room so
that all could see it. Duncan, of Rochester,
wanted to "swap" with Hamilton, but the lat-
ter refused.

It seemed as though everybody went to the

races either in automobiles or on motorcycles.
Columbus may boast of good streets, good
water and extra fine dust.

Many of the boys had to "double up" with
others in order to get accommodations at the
Virginia.

The Columbus Club and dealers are to be
congratulated. Everything went off smoothly.

W. A. Gibson, of Indianapolis, came to Co-
lumbus to inspect the board track, as he is
planning to build one in Indianapolis.

Much speculation was in order in regard
to naming the place where the national con-
vention will be held next year. There was
talk of Cleveland, Toledo and Indianapolis.

Thornley brought out a hearty laugh when,
while the attitude of the Amateur Athletic
Union was under discussion, he jocularly re-
marked: "Chairman Sullivan is even more
pig-headed than I am."

When the question of limiting amateur
riders to a hundred-mile radius was under
discussion Treasurer Wagner, of the Roches-
ter Club, called attention to the fact that the
riders of Elmira, which is just 105 miles dis-
tant from Rochester, often took part in
Rochester race meets. "Happy" Howard
French promptly moved that in order to con-
form with the rules Elmira be moved five
miles nearer to Rochester.

Hastings is again restored to his amateur
standing in athletic sports. When President
Hamilton called for the single vote that
might have kept him in the professional ranks
there was not even a whisper.

The Hall amendment providing that the
business sessions of the F. A. M. should be
held in the winter might have been passed at

Buffalo last year, but the attendance of dele-
gates at the Columbus sessions was so good
and the business transacted so satisfactorily
that the suggestion of the Brooklynite met
with practically unanimous defeat.

Announcement was made in Columbus that
Charlie Balke has been re-engaged to ride
in the Indian camp.

The Columbus meet was distinguished from
all previous occasions of a similar character
by an unusually representative attendance of
trade people.

HANDY ATLAS SOUVENIR.

THE Atlas Specialty Manufacturing Co., of
Chicago, represented in the convention
city by C. J. Wollheim, room 507, Virginia
Hotel, gave away a really useful souvenir
in the shape of a spark plug pocket. This prac-
tical little memento was eagerly sought after
by the boys. Mr. Wollheim states that a large
amount of business was transacted at the
meet. In this connection Mr. Wollheim ad-
vises that the Atlas Specialty Manufacturing
Co. are increasing their capacity, thus enabling
them to cope successfully with the rush of
business which they have been handling heret-
ofore with some slight delay.

BARR IS PRESIDENT.

COLUMBUS, Ohio.—Just previous to the
F. A. M. meeting in Columbus a reor-
ganization of the Columbus Motordrome Co.
was effected. P. A. Vogel, who has been presi-
dent of the corporation since its organiza-
tion, resigned that position and was suc-
ceeded by C. E. Barr, who had been vice-
president. A. C. Edwards was elected vice-
president to fill the vacancy caused by the
advance of Mr. Barr. W. H. Snyder con-
tinues as manager.



AT THE HAMILTON MEET.

THAT Canadian motorcyclists made the most of their opportunity to enthuse over the championship races held at Hamilton, Ont., on July 1, is evident from the line-up of machines and riders appearing in one of the accompanying photographs. The picture was obtained in one of the parks before the meet and shows a comparatively small number of those who rode to Hamilton for the races. It will be noted that there are many women enthusiasts in the party, and that side-cars came in for their share of attention. A group of the passenger "baskets" may be seen at the left of the photograph.

The other picture shows several well-known racers and K. R. Spencer, president of the Canadian Motorcyclists' Association. From left to right: Joe Baribeau, of Winnipeg, one of the best known speedsters of the Dominion; Don Klark, of Detroit, the Indian rider; Frank Kerr, of Toronto; President Spencer and Harold Cole, the youthful rider who held the Canadian championship last year. The photographs are published by courtesy of the Dunlop Tire & Rubber Goods Co., Ltd., of Toronto.



PACIFIC DISTRICT MEETING.

TACOMA, WASH.—One hundred motorcyclists, members of the F. A. M., met July 3 at the quarters of the Seattle Motorcycle Club, Fortieth avenue and Madison streets, for the semi-annual meeting of the Pacific district. After a short business meeting at which nominations for various officers were made, the members and their guests enjoyed a banquet, with the out-of-town visitors as honorary guests. J. B. Lindsay, of the Portland Motorcycle Club, was the choice of the meeting for vice-president of the district. Walter Sterling, of Seattle, was the nominee for secretary, and Floyd R. Ritchie, of Hoquiam, for treasurer.

The Seattle Motorcycle Club is the largest in the district, which comprises Washington, Oregon, Montana, Idaho and Wyoming. There are now 120 active and enthusiastic members, and they find their new home spacious and cozy. Of the Portland Club there were present at the banquet J. B. Lindsay, A. G. Dunnehan, E. O. Lucas, C. J. Ford, W. P. Brush and Elvin Condit.

TEN RIDERS FINISHED

In Baltimore Run into Pennsylvania, but Only Five Managed to Keep Their Scores Clean.

BALTIMORE, Md.—The endurance run of the Chesapeake M. C. to Lancaster, Pa., over a 200-mile route, on Sunday, June 30, was a great success. Out of the nineteen entries twelve started and ten finished. This was the first long cross-country run held in this section this year. The members of the club are so well pleased with the results that they have determined to make other similar trips.

The roads on the way to the Keystone city were found in fairly good condition and the checking points were made on time by five of the riders, who came through with perfect scores. The other five were penalized for various reasons. There were no bad spills. The route was by way of Reisterstown, Westminster, Littlestown, Hanover, Abbottstown, York and Columbia to Lancaster. There were

ten prizes contributed by dealers. Those who finished were as follows:

	Points.
Samuel C. Brown, Thor 7.....	100
W. D. Hoffman, Indian 5.....	100
E. C. Roof, Indian 7.....	100
Chester Sherman, Merkel 4.....	100
C. H. Lederer, Flanders 4.....	100
George W. Coggins, Yale 4.....	99
Fred Kuhl, Indian 7.....	74
Herbert Vetter, Yale 4.....	49
Frank Hughes, Yale 4.....	25
A. H. Herklotz, Thor 3½.....	24

TO HOLD BEACH RACES.

RACES will be held by the Galveston (Texas) Automobile Club on the beach track August 8-10, and several events for motorcyclists have been listed. Applications for entry blanks should be addressed to L. Lee Adams, 405 Caroline street, Houston, Tex.

THE Johnson Cycle Company, 420 Waccuta street, St. Paul, Minn., has taken the agency for the Pope motorcycle.

CHAPPLE CLIPS TWO MARKS

Lowers One-Mile and Thirty-Mile Records in Whirlwind Events on Brighton Bowl.

ARTHUR CHAPPLE rode in invincible form at the Brighton Beach Motordrome Tuesday night, July 23, when he broke two track records. The first record to go was the one-mile mark of $39\frac{1}{4}$ seconds, which he lowered to $39\frac{1}{2}$ seconds. The second time reducing feat occurred when he won the feature event, the international thirty-mile championship, in 21 minutes $38\frac{1}{2}$ seconds, as against the old record of 23 minutes 25 seconds. To do this Chapple had to cover the thirty miles at the rate of 87 miles an hour. Wray, Cox and Mercier finished in that order behind Chapple.

Chapple finished over five miles ahead of Wray. He was completely exhausted by the long grind, and had to be helped from his machine blind and in a fainting condition.

Chapple went out to annihilate time and space from the very start, gaining five laps in the first five miles on Wray and Cox, who were fighting it out for second. In the next five miles he gained only one lap, but from then on he continued lengthening his advantage until he finished with his big lead of one-sixth of the distance covered. Chapple was the only one of the five starters who did not drop out of the race at any time. Costello quit for good at the second mile.

Because of motor trouble Cox dropped out at sixteen miles to replenish his oil supply and was not ready to resume until Wray had gained about a mile over him for second place. But Wray had to drop out at almost the same time, so they were both out together. Cox got off again earliest, but the two riders stuck together until the end, when Wray finished a mile ahead of his rival for second honors. Mercier was fourth.

Mike Costello, though still new as a professional, took all three heats in the professional five-mile race. He went out ahead from the start in the first two heats, winning the opener by half a lap and the second trial by 100 yards. The last was a harder fought race, but Costello outgeneralled them all, coming up from the rear in the last lap and winning by twenty-five feet. The summaries:

Two-mile amateur—First heat won by Reggie Lyons; Ira Vail, second; Jimmie French, third. Time, 1:48. Second heat won by Lyons; French, second; Vail, third. Time, 1:49½.

Five-mile professional—First heat won by Mike Costello; Billy Wray, second; Ferdie Mercier, third; Johnny Cox, fourth. Time, 3:36. Second heat won by Costello; Wray, second; Cox, third; Mercier, fourth. Time, 3:40½. Third heat won by Costello; Cox, second; Mercier, third; Wray, fourth. Time, 3:51½. Race won by Costello with 15 points; Wray, second with 7 points; Cox, third with 6 points; Mercier, fourth with 5 points.

Three-mile exhibition—Johnny Albright of Denver. Time, 2:11½.

International championship, 30 miles—Won by Chapple; Wray, second; Cox, third; Mercier, fourth. Time, 21:36½.

One-mile time trial to lower world's record of $39\frac{1}{4}$ —Arthur Chapple of New York. Time, $39\frac{1}{2}$.

BRIGHTON, N. Y., July 12.—A number of exciting events were held on the Brighton motordrome tonight, the chief being the five-mile pro heats in which Billy Wray and Charlie Davis figured. In the first heat "Smiling Johnnie" Cox rode against Wray and Davis, but had to retire because of a disabled oil-pump and connections. Wray and Davis fought it out, touching knuckles several times during the event. Wray finally won, in $3:52\frac{1}{2}$. In the second heat Chapple won, but the inter-

est of the spectators was again centered on Davis and Wray, who rode wheel to wheel and touched several times. Wray came second and Davis third. In the third heat Davis took second place and Wray third, Chapple winning again. In the final event, a five-mile handicap, Albright, of Denver, was an added starter, and gave one lap to Wray and Davis. Albright dropped out through lack of fuel before completing the third mile and Wray won.

In the amateur match race between Constant and Costello, the former won by half a wheel-length. The attendance was 8,000. The track was slightly damp. Summaries:

Amateur match, 3 miles—Won by J. U. Constant (7 Indian); second, Mike Costello (7 Merkel). Time, 2:15.

Three-mile time trial—John Albright (7 Indian). Time, 2:07½.

First heat, pro., 5 miles—Won by Billy Wray (7 Indian); second, Charles Davis (7 Indian); third, John Cox (Baxter-J.A.P.). Time, $3:52\frac{1}{2}$.

First heat, match, Albright vs. Mercier, 5 miles—Won by Albright. Time, 4:05½.

Second heat, pro., 5 miles—Won by Chapple; second, Billy Wray; third, Charles Davis (all on Indians). Time, $3:53\frac{1}{2}$.

Second heat, match, Albright vs. Mercier, 5 miles—Won by Albright. Time, 4:08½.

Third heat, pro., 5 miles—Won by Chapple; second, Davis; third, Wray. Time, 4:03.

Five-mile pro. handicap—Won by Wray (1 lap); second, Davis (1 lap). Albright (scratch), out. Time, $3:53\frac{1}{2}$.

SNAPPY PRO EVENTS

Albright and Veditz and Chapple and Wray Figure in Match Races on Brighton Saucer.

BRIGHTON BEACH, July 17.—Most of tonight's program was run off before rain set in and the track became unrideable. The main interest centered in the local pro events, in which Mike Costello starred. Unusually interesting were the matches between Albright and Veditz, the latter of Philadelphia, and between Chapple and Wray. In the Albright-Veditz events, the former won both, his times for the three miles being respectively $2:26\frac{1}{2}$ and $2:28\frac{1}{2}$. Chapple won both his heats in $2:21\frac{1}{2}$ and $2:25\frac{1}{2}$. Costello took first place in the first and final heats of the five mile pro, losing the second to "Smiling Johnnie" Cox. The attendance was good. Following are the summaries:

Three-mile time trial—Arthur Chapple (Indian). Time, 2:13½.

First heat, five-mile pro.—Won by Mike Costello; second, John Cox; third, Ferd. Mercier. Time, 3:43.

First heat, three-mile match race, Albright vs. Ray Veditz—Won by Albright. Time, $2:26\frac{1}{2}$.

First heat, match race, three miles, Chapple vs. Billy Wray—Won by Chapple. Time, 2:21½.

Second heat, pro.—Won by John Cox; second, Costello; third, Mercier. Time, $3:48\frac{1}{2}$.

Second heat, match race, Albright vs. Veditz—Won by Albright. Time, $2:28\frac{1}{2}$.

Second heat, match race, Chapple vs. Ray—Won by Chapple. Time, $2:25\frac{1}{2}$.

Final heat, five-mile pro.—Won by Costello; second, Mercier; Cox out. Time, $3:44\frac{1}{2}$.

BRIGHTON, July 16.—Tonight's star event was the 25-mile professional, won by Albright. The summaries:

First heat, amateur, 3 miles—Won by J. French (7 Indian); second, Jas. Friederich (7 Merkel). Time, $2:57\frac{1}{2}$.

Three-mile time trial—Arthur Chapple, 2:11½.

First heat, pro., 5 miles—Won by John Albright (7 Indian); second, Mike Costello (7 Merkel); third, F. Mercier (7 Indian). Time, 3:41.

Second heat, amateur, 3 miles—Won by J. French; second, Jas. Friederich. Time, $3:02\frac{1}{2}$.

First heat, match race between A. Chapple and F. Mercier, 3 miles—Won by Chapple. Time, $2:18\frac{1}{2}$.

Second heat, pro., 5 miles—Won by J. Albright; second, Mike Costello; third, Ferd. Mercier. Time, 3:44.

Second heat, match, Chapple and Mercier, 3 miles—Won by Chapple. Time, $2:18\frac{1}{2}$.

Twenty-five-mile pro. race—Won by John Albright; second, Ray Veditz. Vandenberg and Mercier retired. Time, 21:03½.

ALBRIGHT WINS FROM WRAY

Denverite Captures Match Event and Hollenbeck Romps Off with Feature Pro Race.

BRIGHTON BEACH, July 20.—The Albright-Wray match events to-night shared the interest of the fans at the Motordrome with the five-mile pro heats and the final handicap. In the first heat of the match Albright won, covering the four miles in $3:02\frac{1}{2}$, with Wray a good second. In the second heat Wray pushed the Denverite hard, but the latter won by a small margin in 3:08. "Smiling Johnnie" Cox, on an Indian, opened out and led the field by about half a lap during the first pro heat; his time was $3:43\frac{1}{2}$. In the second heat the visitor from Philadelphia, "Billy" Hollenbeck, demonstrated his capacity for speed and followed Cox's example, although closely pursued by Wray. Hollenbeck won in 3:54. In the final heat Hollenbeck again won, leading Cox by only a wheel over the tape. In the handicap Albright completed but two miles of the six and retired with a disconnected magneto lead. Wray ran out of oil and suffered bearing troubles, quitting in the fourth mile. Hollenbeck, the survivor, covered the 17 laps in 4:24. The weather was clear until the final, when rain fell. A large crowd cheered on the racers. Several straw hats escaped from their owners and much amusement was caused by the efforts of an official to scale them from the infield to their owners in the bleachers. The summaries:

First heat, amateur match, 2 miles—Won by Jim French (Indian); second, Otto Berke (Merkel). Time, 1:57.

Three-mile exhibition—John Albright. Time, 2:13. First heat, pro., 5 miles—Won by J. J. Cox (Indian); second, Hollenbeck (Indian); third, Mercier (Indian). Time, $3:43\frac{1}{2}$.

Second heat, amateur match, 2 miles—Won by Jim French; second, Otto Berke. Time, 1:55.

First heat, match, Albright vs. Wray—Won by Albright. Time, $3:02\frac{1}{2}$.

Second heat, pro., 5 miles—Won by Hollenbeck (Indian); second, Mercier; third, Cox. Time, 3:54.

Second heat, match, Albright vs. Wray—Won by Albright. Time, 3:08.

Third heat, pro., 5 miles—Won by Hollenbeck; second, Cox; third, Mercier. Time, $3:44\frac{1}{2}$.

Six-mile pro. handicap—Won by Hollenbeck (1 lap); Albright (scratch) out, 2 miles; Wray (2 laps) out, $4\frac{1}{2}$ miles. Time ($5\frac{1}{2}$ miles), 4:24.

The races scheduled for July 21 were postponed on account of rain.

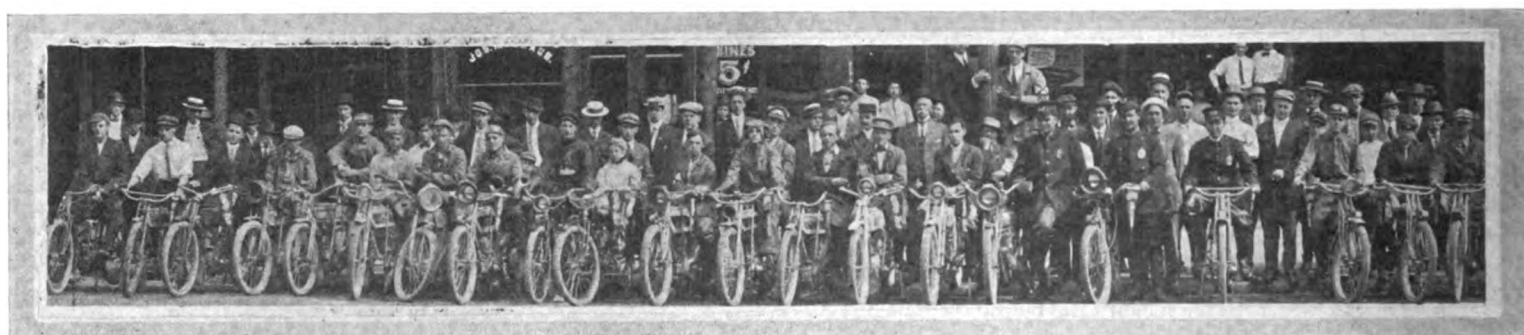
A TANDEM HONEYMOON.

SAN JOSE, Cal., is the scene of another motorcycle honeymoon. George T. Van Nortwick, an electrician of Oakland, and Miss Lorna Doane Feathers, astride a motorcycle, journeyed from Oakland to San Jose. Their first stop was at the county clerk's office, where the marriage license was obtained. After they were married by Judge Dougherty and given the benediction of the court, they left for a honeymoon ride about San Jose.

A SOCIABILITY RUN.

THE Allen Motorcycle Club, of Allentown, Pa., held a sociability run on July 14 to Delaware Water Gap and return. The riders assembled at the club's headquarters and proceeded by way of Bethlehem, Wind Gap, Salersburg, Stroudsburg to the Gap. They had a special dinner at the Gap and returned late in the afternoon over the same route.

INDIANAPOLIS RIDERS ENTERTAINED BY GUS HABICH ON BIG OUTING AT HIS SUMMER CAMP



PROGRESS ON ROAD BILLS.

WASHINGTON, D. C.—Senator Warren, of Wyoming, has succeeded in having an amendment providing for \$77,000 for the purpose of building four motor roads, one from each approach to the entrance to Yellowstone Park, and connecting with the main road which passes all the principal points of interest in the park. Motor vehicles are now excluded from the park. Senator Myers, of Montana, had a wordy war with Senator Reed,

of Missouri, over an amendment to the sundry civil bill providing for \$77,000 to be used in building new roads and trails and making plans for road improvements in the Mount Rainier National Park, Washington. Senator Reed unsuccessfully sought to have the provision eliminated. It has not yet passed the Senate but the chances are that it will. The amendment of Senator Heyburn, of Idaho, for \$250,000 for motorcycle and automobile roads inside the Yellowstone National Park has not yet come up for action.

GOOD ROADS CONGRESS.

WASHINGTON, D. C.—President Taft and Governor Woodrow Wilson will meet, shake hands, and join in the boosting of the Good Roads movement at the American Road Congress to be held at Atlantic City, September 30 to October 5, inclusive. At this Congress all the organizations interested in highway improvements will be represented, including more than fifty State, county and local associations that are working with the American Association.

RACERS MUST USE CARE

Because of Recent Accidents Salt Lake Speedsters Will Be Fined for Recklessness.

SALT LAKE CITY, UTAH.—Because of the accidents which have been taking place on the Wandamere motordrome during the last month, W. D. Rishel, referee of the track, has announced that any rider making a move that is "not according to Hoyle," will be promptly fined. He carried this into practice by fining Ben Johnson \$10 for close riding in the meet on July 12.

Whittler broke the one-mile track record made by Ray Seymour last year. He rode the mile in 41.03, lowering the old record by three-fifths of a second. In the six mile race, Brodbeck, McNeil and Bernstrom were well matched. Whittler was there, riding in front and then behind, until the last lap, when he went around and finished first. McNeil, who had been giving Brodbeck plenty to think about, ran out of gasoline and was forced to quit. Bernstrom finished a close third.

The three-mile professional point event between Brodbeck, Bernstrom and McNeil was the best race of the evening. All three heats were hotly contested, and McNeil won from Brodbeck with Bernstrom third.



NOVEL ECONOMY TEST.

OF more than passing interest is the accompanying photograph which shows the contestants lined up for the start of a recent economy test in Oakland, Cal. It will be noted that at the extreme right four riders are mounted on one machine, a two-speed Indian.

One of the tandem riders was a woman enthusiast who is shown at the left. J. P. Swanson, mounting the Harley-Davidson which appears in the center of the picture, won the event by traveling five miles on nine and a quarter ounces of gasoline. Swanson is a member of the Oakland M. C.

Ralph Rognon showed up well in winning the sixth event. The first event that he was entered in was somewhat of a disappointment to him, as he carelessly entered the race without filling his oil tank. Summaries:

Three-mile professional point race, first heat; McNeil, Indian, first; Brodbeck, Merkel, second; Bernstrom, Indian, third. Time, 2:17½; second heat, Brodbeck, Merkel, first; McNeil, Indian, second; Bernstrom, Indian, third. Time, 2:15; third heat, McNeil, Indian, first; Brodbeck, second; Bernstrom, third. Time, 2:15:1. Final points, McNeil, 8; Brodbeck, 7; Bernstrom, 3.

Four-mile professional; O. Johnson, Merkel, first; Duckworth, Indian, second; B. Johnson, Indian, third. Time, 3:14.

One-mile record trial; Seymour's time 42:2, Whittler's time, 41:3.

Five-mile professional, B Class; R. Rognon, Indian, first; Johnson, Indian, second; McCall, Indian, third. Time, 3:54½.

Six-mile A Class; Whittler, Merkel, first; Brodbeck, Merkel, second; Bernstrom, Indian, third. Time, 4:27½.

TWELVE SCORES INTACT

Thirty Riders Started on Reading Run but Heavy Going Soon Reduced the Ranks.

READING, Pa.—Out of 30 starters 12 finished with perfect scores in the endurance run of the Reading M. C. on July 14. The start was made from Reading at 6 a. m., and the route led through Norristown and Philadelphia to Easton, where an hour was allowed for dinner. From Easton the riders proceeded to Allentown and then returned to Reading. The total distance covered was 170 miles and the actual riding time was 9 hours 15 minutes. The competitors and their scores were as follows:

Dan Hart, Indian	1,000
James Mayo, Merkel	1,000
Wm. Buel, Harley-Davidson	1,000
Sam. Killian, Indian	1,000
P. Maurer, R-S.....	1,000
Jacob Deysher, R-S.....	1,000
Wm. Stoudt, R-S.....	1,000
Samuel Nye, Indian	1,000
Wm. Henry, Indian.....	1,000
James Dunkel, R-S.....	1,000
Ezra Hartman, Excelsior.....	1,000
Ben Pike, R-S.....	1,000
Robt. Haenchen, R-S.....	969

Chas. Hart, Indian.....	967
John G. Nuebling, Indian.....	956
Wm. Schaeffer, R-S.....	Out
Mrs. Wm. Schaeffer, R-S.....	Out
Ray Fritz, Indian.....	Out
Geo. Andrews, Merkel.....	Out
R. Dietrich, Merkel.....	Out
Walter Clausen, Pope.....	Out
N. R. Porterfield, R-S.....	Out
Geo. Mack, R-S.....	Out
John Hartman, R-S.....	Out
Milton Reese, R-S.....	Out
Joe Grossman, Indian.....	Out
John Biehl, R-S.....	Out
Ellis Landis, Harley-Davidson.....	Out
Wm. Eisenhower, Merkel.....	Out
Chas. Romig, R-S.....	Out

"GRIP-TITE" GLOVES.

HAND in hand with the progress of the motorcycle, the live manufacturing concerns of the day are taking progressive strides which are of more and more assistance to ardent motorcyclists. The latest thing is a new glove, with a double corrugated palm and double thumb which insures perfect control at all times with almost no effort. The corrugations easily grasp the ridges of the control, and relieve the rider of the former strain of constant effort to retain a firm grip.

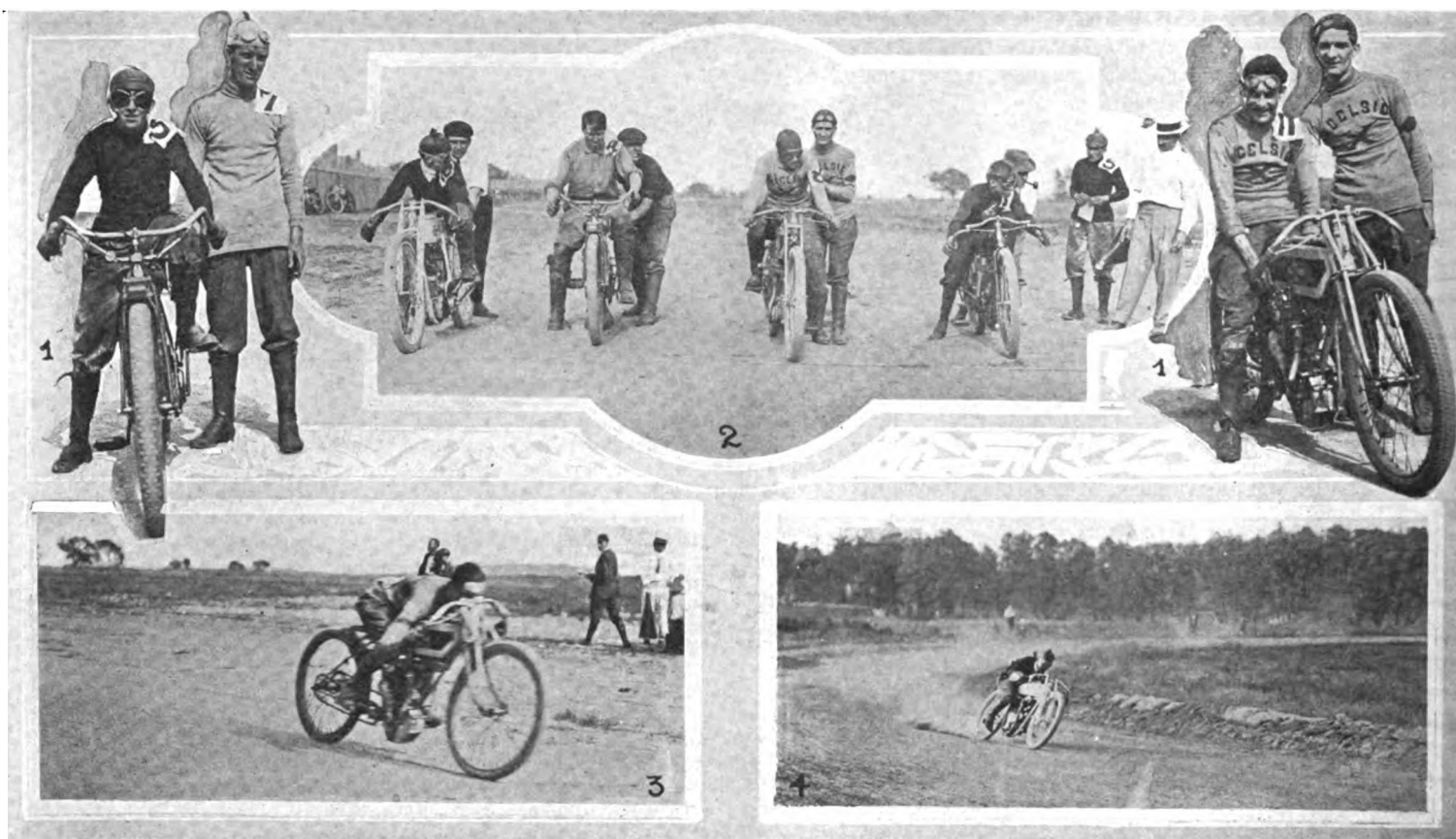
The wearing qualities of the "Grip-Tite" gloves are unusual, for not only is the glove made of an exceptional quality of washable, ever-pliable leather, but the double palm is an additional wearing feature, and when at last it wears out, it can easily be ripped off, and leave still a practically new pair of gloves. In preparing this "Grip-Tite" glove the manufacturers, the Morrison-Ricker Manufacturing Company, of Grinnell, Iowa, has taken a step in the motorcycling field, which will prove of benefit to hundreds of riders, as well as to themselves.

SHORT GRASS TOUR.

ACCORDING to President-Elect Patterson, who is in charge of the Short Grass Tour, entries are coming in with satisfactory rapidity, but inasmuch as there will be accommodations for two hundred tourists about twenty-five or thirty more can be accommodated. Those who wish to take part should communicate with Dr. Patterson, at Pratt, Kan., at once. The start will be made August 11, and a fortnight of pleasure may be had for the nominal outlay of \$30 for the entire trip.



The Late Bob Hunter and Brownie Carslake.
Below—Finn Huttering, of the Cleveland Motordrome.



IN the accompanying photographs appear a number of the riders who were featured in the races held at Saugus, Mass., on July 4. Picture No. 1 shows Collins at the left, mounting his Indian, and DeLong with his Excel-

sior; No. 2 shows the boys lined up for the start of the 25-mile race—from left to right they are Crandall (Thor), Firman (Indian), Smith (Excelsior), and Carroll (Indian); No. 3 shows DeLong at top speed in the ten-

mile event which he won; No. 4 gives a view of Crandall (Indian) rounding a turn wide open. The photographs are forwarded by C. E. DeLong, of the Hub Motorcycle Company, of Boston.

WICHITA WINNERS.

WICHITA, KANSAS.—A 180-mile run from Wichita to Cottonwood Falls, Kansas, was held by the Wichita M. C. on July 8, ten members of the club making the trip. Although only the second run, this contest closes the series because the three riders who won trophies in the first run repeated their victories yesterday. The Wichita club had purchased three cups to be contested for by trade riders, professionals and private owners, Wells Bennet, a professional rider, John Branson, in the trade class, and G. E. Woodwell of the private owners' division, all of whom won firsts on the first run, occupied the same positions in the July 8 run and thereby became the permanent owners of the cups. Checks for the run were maintained at Wichita, Peabody and Cottonwood Falls, and there were two secret controls, making ten time checks in all.

Bennet rode an Indian single, the machine on which he won two races in the Winfield (Kansas) meet on July 4. Woodwell rode a twin Excelsior 6 and Branson an Excelsior 7. Besides these men, Frank Kenegy, on a single Indian, F. A. Honer on a twin Merkel, and Paul Garst on a single Harley-Davidson made perfect scores. The run was made on a 20-mile-an-hour schedule.

PLAN ANOTHER MEET.

MINNEAPOLIS, Minn.—So successful was the racing meet held in this city a week ago under the auspices of the Minneapolis Motorcycle Club that the promoters have decided to stage another contest, prob-

ably the latter part of August. Otto Frykman, who managed the contest, will again assume the duties of manager for the coming meet. He has already started a scouting campaign to see if some professional or trade riders can be secured. Members of the club are of the opinion that the contest should be held on Saturday, August 31, which is just two days before the opening of the Minnesota State Fair, as there are then thousands of people in the Twin Cities.



THAT SAN JOSE SPILL.

WILL T. BAKER, of San Jose, Cal., appears in the accompanying photograph on the machine with which he was competing in a race meet on June 30 when he figured in a fatal spill. Baker and Reed Orr, the latter of Sacramento, both succumbed to their injuries. A broken exhaust pipe was dropped from one of the racing machines and in trying to avoid striking it a rider named House went down, carrying C. D. Reade with him. Baker and Orr crashed into the fallen machines.

PECK AND WEST DIVIDE HONORS.

NEWARK, July 20.—Ray Peck and Fred West, both California pros, cleaned up in their respective classes at the Motordrome today. Peck won his events with ease, but West fought it out with Charlie Davis, of Brooklyn, who finished a close second in the three heats. The Class B men showed speed in the three-mile events, being only 1-5 of a second slower than the Class A for the same distance. The summaries:

New Jersey club race, amateur, 4 miles—Won by Brown (Indian); second, Segelbach (Indian). Time, 3:20¾.

Class B, pro., 2 miles—Won by Fred West (Indian); second, C. Davis (Indian); third, Johnny King (Indian). Time, 1:30¾.

Class A, pro., 2 miles—Won by Ray Peck (Excelsior); second, Larry Fleckenstein (Indian); third, F. A. King (Indian). Time, 1:29¾.

Exhibition to establish one and two-lap record for four-lap track, by Ray Peck—First mile, 0:42¾; second mile, 1:23¾.

Class B, pro., 3 miles—Won by West; second, Davis; third, Carlson. Time, 2:14¾.

Class A, pro., 3 miles—Won by Peck; second, Fleckenstein; third, King. Time, 2:14¾.

Class B, pro., 5 miles—Won by West; second, Davis; third, Carlson. Time, 3:49¾.

Class A, pro., 2 miles—Won by Peck; second, Fleckenstein; third, King. Time, 1:29¾.

Free-for-all, 6 miles—Won by Peck; second, Fleckenstein; third, West; fourth, Davis; fifth, King. Time, 4:29¾.

PORTLAND RACES.

PORTLAND, ORE.—Vern Maskell, riding a 7 h. stock Indian, won the big event of the Portland Motorcycle Club meet at the Country Club track on July 7, covering ten miles in 9:28¾, in competition with a seven Thor and an Excelsior. The fastest mile of the day was made in this event, Brant, on the Thor, making a round of the oval in 55 sec-

onds, one second slower than the record at the last meet held by the club. Over 3,000 enthusiasts turned out for the occasion.

Five miles, 30.50 class, stripped stock—Brush (Merkel), first; Vucick (Excelsior), second; Hall (Excelsior), third. Time, 5:35.

Six miles, 30.50 class, ported—Hill (Harley-Davidson), first; Godfrey (Indian), second; Brown (Merkel), third. Time, 6:26.

Five miles, 61 class, stripped stock—Brant (Thor), first; Maskell (Indian), second; Peppel (Excelsior), third. Time, 4:47.

Pursuit race—Archie Taft (4 h. Excelsior), won in 20th lap.

Eight miles, 30.50 class, ported—Berreth (Indian), first; Nowotny (Indian), second; Hill (Harley-Davidson), third. Time, 8:10 1/4.

Ten miles, 61 class, stripped stock—Vern Maskell (Indian), first; Peppel (Excelsior), second; Brant (Thor), third. Time, 9:28 3/4.

Five miles, 30.50 class, stock belt—Brush (Merkel), first; Hall (Excelsior), second; Allen (Pope), third. Time, 5:36 1/4.

Five miles, 61 class, stripped stock—Maskell (Indian), first; Peppel (Excelsior), second; Brant (Thor), third. Time, 4:47 3/4.

Officials—J. B. Lindsay, referee; H. E. Mead, clerk of course; C. Menizes, R. L. Short and H. W. Reibenstein, judges; Bruce Campbell, De Witt Harry and E. Jaeger, timers; C. H. Hassenpflug, George Douglas and H. A. Eyl, scorers.

BAD SPILL MARRED MEET.

DUBUQUE, IOWA.—A shadow was cast over an otherwise successful meet here on July 7 when Sylvester Henry Cody, a professional rider, sustained fatal injuries in a 10-mile open event. Cody attempted to crowd in between two other riders but collided with one of them and was hurled to the track. E. J. Meisel, of Cedar Rapids, could not clear the fallen rider and his machine passed over Cody's chest, inflicting mortal injuries. Summaries:

Five miles, private owners, stock—Risenger, of Maquoketa, first; Ray Miller, of Dubuque, second; Volenweider, of Peosta, third. Time, 6:17.

Ten miles, open pro., 30.50 class—Yonkers, of Cedar Rapids, first; R. Hitchcock, of Davenport, second. Time, 11:23 1/4.

Six miles, open pro., 30.50 class—Yonkers, first; Hitchcock, second; J. Meisel, of Cedar Rapids, third. Time, 6:43.

Seven miles, private owners, 61.00 class—Alvord, of Davenport, first; Hansen, of Davenport, second; Wright, of Davenport, third. Time, 9:34.

Ten miles, open pro., 30.50 class—Yonkers, first; Meisel, second; Hitchcock, third. Time, 11:03.

DAVIS FATALLY HURT.

HARRY B. DAVIS, of Salt Lake City, Utah, a recent recruit to the racing ranks at the Wandamere Motordrome, sustained fatal injuries when he lost control of his machine while spinning the bowl at top speed. Davis struck a pole supporting an arc lamp with such force that the entire lighting system of the track was disabled. His machine charged into the crowd and injured seven spectators.

A WILLIAMSPORT RACER.



E. G. Staldes.

IN the accompanying photograph E. G. Staldes, of Williamsport, Pa., is shown with the Flying Merkel machine on which he has ridden some spectacular races of late. Staldes is a speedster who is always ready to test his nerve and endurance against a rival and he is counted upon to enliven any meet at which he appears.

W. H. HARTER, mounting an Excelsior 7, captured the 3-mile road race at Rising Sun, Ohio, on July 4, by finishing the event in 2:58.

KRACKOWIZER'S RECORD

Monarch Rider Covers 496.6 Miles in Twenty-Four Hours and Sets New Road Mark.

MOUNTING a 5 h. single-cylinder Monarch, H. J. Krackowizer, well-known in motorcycle circles in New York and vicinity, established a new 24-hour road record for the single-tracker July 6-7 by riding 496.6 miles over a course laid out between Utica, N. Y., and East Syracuse. Krackowizer's actual riding time was 21 hours 25 minutes.

The start was made from Genesee and Columbia streets, Utica, at 6 p. m. on Saturday, July 6, and the rider covered his laps as follows: 95.7 miles, 95.4 miles, 52.7 miles, 95.4 miles, 95 miles and 62.4 miles, thus indicating that he went over the course in part six times. In order to have everything "aboveboard"



Krackowizer made arrangements for one of the F. A. M. members of the Utica club to accompany him on each lap, so that he was under the eyes of a reliable checker at all times. Prosper Jenney made the first lap out of Utica as checker; Fred Waterman accompanied the Monarch speedster on the second round; Frank Snyder and Waterman were his checkers on the third trip; Dayton Roth on the fourth lap and Abe Rizika on the fifth and sixth. Other members of the Utica club assisted with the checking and timing.

When Krackowizer finished the long grind he was covered with dust, mud and oil, the latter causing considerable trouble as it was thrown up from the freshly oiled roads, but otherwise he appeared to be in good condition. Krackowizer's record is all the more remarkable in that it was made with a single-cylinder machine against the former mark of 482 miles which was set up by a twin. The only mechanical trouble encountered was a broken oil pipe on the third lap. The Empire tires fitted to the machine came through intact.

LABOR DAY MEET.

WASHINGTON, D. C.—The next big event in the motorcycle line for this locality will be the meet at Benning track Labor Day. The Central Labor Union will be in charge of the program.

RACES were held at the Keeley Park track in Jackson, Mich., on Sunday, July 21, six events ranging from one to fifteen miles being staged.



M. C. Parrish, of Seattle.

RAIN STOPPED MEET

Big Crowd Was Disappointed When Seattle M. C. Races Were Called Off—Parrish a Winner.

SEATTLE, WASH.—A record-breaking crowd turned out for the Fourth of July race meet at Madison Park under the auspices of the Seattle Motorcycle Club. The fans were disappointed, however, as the management very wisely declared the races off on account of rain. The track had become slippery and was increasingly dangerous with each five minutes of rain.

E. L. Berrett, riding a Merkel, skidded at a curve in the three-mile open event and turned a somersault. He immediately sprang to his feet and rode a lap and a half in plucky fashion before he withdrew from the heat. In the next event, the first heat of the three-mile amateur stripped stock event, he drove his Merkel home an easy winner, with M. C. Parrish on a Merkel second, and Zwick on an Excelsior, third.

The first event, a five-mile amateur race, was won by Parrish on a Merkel, with George Brennan, Excelsior, second, and E. T. Lachall, Excelsior, third. The time of the Merkel was 6:40:5. Berrett's time in the stripped stock event was 3:51:4. In the open three-mile amateur Brant, the winner, made it in 3:34:4. Zwick, Excelsior, was second and Godfrey, Indian, third.

DENVER MEET POSTPONED.

DENVER, Col.—Rain again interfered with the Tuileries racing program on Sunday, July 21, but not until the first race was well under way. Then it came down in such quantities it was impossible to finish the program, much to the disgust to the loyal fans who had braved the threatening weather to see the speed demonstration. Although seriously handicapped by the wet track, Patterson and Bowen put up a very exciting race for first honors, with Swartz hanging on behind awaiting the first opportunity to slip past either rider for second place. Cox managed to hang on behind the trio for a while, but his eyes got so full of the mixture of smoke, oil and water, he having removed his goggles, that he was forced to slip to the rear. Result:

Three-mile open professional, 61 class—Patterson (Merkle), Bowen (Merkle), Swartz (Indian). Time, 2:12 3/4.

RACE followers turned out in large numbers to the meet staged in Winnipeg, Can., on July 1 and unusual interest was aroused because of the fact that American and English machines were matched in several of the events.

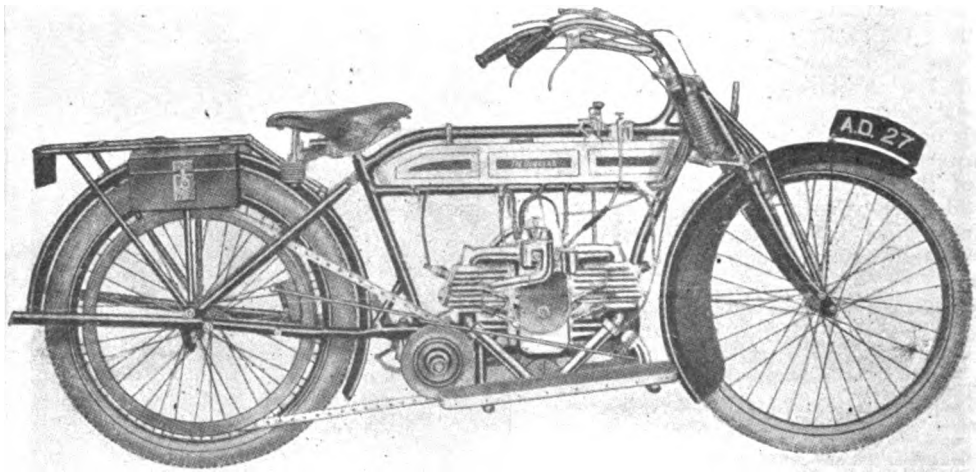
ENGLISH NOTES

BY BRITISHER

British Builders Give Serious Thought to Two-Stroke Scott, Winner of Senior Trophy—Pointers on the Douglas and Description of Handy Carrier Device.

WE are still gasping over the smashing defeat administered to the cream of our industry by the Scott two-stroke, and no doubt your riders are a little surprised to hear that the all-conquering Indian had to play second fiddle to what Tom, Dick and Harry would term a freak design. The two-stroke engine has undoubtedly made good. Its capacity was only 486cc. as against the 497cc. of the special Indian engines, the 497cc. of the Jap twins, and the 499 of the Triumph singles; yet it licked the fastest English single by 6 minutes 54 seconds, the fastest English twin by nearly 10 minutes, and the fastest American twin by 23 minutes. We may grant that the American jockeys were not quite such cracks as those who represented you in 1911, but Godfrey's winning time in 1911 was one and one-half minutes less than the victor took in 1912. I do not personally consider that the two-stroke engine (viewed in its present state of evolution) has shown any intrinsic vantage over the four-stroke.

The two Scotts were ridden by two of the best men in the race, and on jockeyship alone were bound to figure high up. Again, the chassis on which the Scott two-stroke engine is mounted shows off any engine to the best advantage. In the cant phrase of our racing men, they hug the road like a postage stamp. The open frame, composed exclusively of straight tubes, has a little central whip, which absorbs bounce; the spring forks are among the four best on the roads of the world, and reduce front wheel wobble and bounce to the absolute minimum; the frame possesses a longitudinal rigidity, which offers a taut leverage for engine drive; and all the weight is concentrated in the dead center of the wheel-base. No other machine entered possessed all these advantages in such high degree. The



Douglas: Type of Winner in Junior T. T. Race.

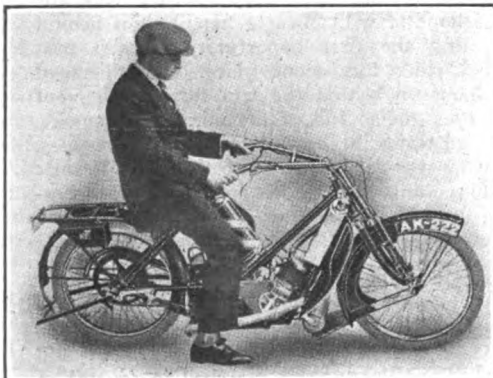
result was that the Scotts could swoop down rough straight stretches absolutely all out when other men were lifting their valves to correct front wheel wobbles, or bouncing about like corks, and shutting down their throttles in sheer terror; while at all the bends the Scotts swept round in smooth curves on an even keel at the absolute limit of speed, while other men were bucketting, and jumping, and swerving, and wobbling. Thus the two-stroke engine, regarded as a power unit, plain and simple, evinced equality with the four-stroke, but failed to demonstrate superiority. It is, however, questionable whether in other respects, apart from sheer speed, it did not

demonstrate its superiority. The plain man in the street, who is not a motorcyclist, plumps for the Scott every time; its smooth even running and continuous gentle purr appeal to him, when the isolated bangs of a four-stroke only repel him. Riders submit that the steady torque of a two-stroke engine is pleasanter to sit over than the smoothest gait of a four cylinder four-stroke such as the F. N., Pierce-Arrow, or Henderson.

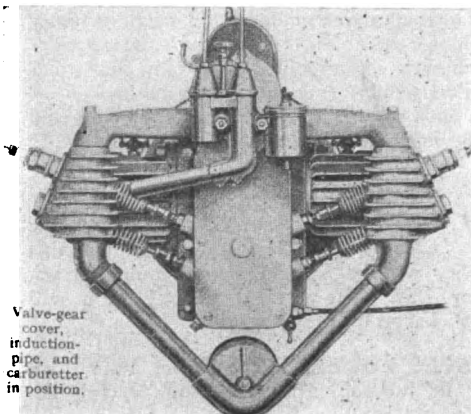
Altogether, it is quite on the cards that our engineers have dismissed the two-stroke design too prematurely, and that it may come with a rush, and flutter the four-stroke devotees. Prior to the race the Scott factory was working double shifts, day and night, and could not deliver for four months. Add the advertisement of its T. T. victory and it is certain that unless the factory is extended, orders must be placed in 1912 for delivery by Christmas, 1913. I should add that in the race the Scott engine was not a true valveless, a gear-driven rotary valve being specially incorporated to secure the maximum nicety of operation and timing; but the tourist samples are all truly valveless.

The Winner of the Junior.

DESIGNERS who abhor the conventional and plump for originality in all things may take much comfort from our 1912 races, for the Douglas machines which swept the board in the 340cc. race were quite as freakish as the Scotts, but in a different direction. I am sending the editor a few cuts of the Douglas specialties in design, from which you will



Scott Two-Stroke Machine.



Douglas Opposed Motor.

see that it has a double-cylinder engine of the horizontally opposed type, set longitudinally in a diamond frame; and as Bashall, who steered the fastest sample to victory, scales well over 150 pounds you will guess this is a hefty power unit. Once again, I think the race flatters the winner a trifle. But for the pouring rain in the first lap, the Humber machines would certainly have hunted the Douglas home. The Humber has a V twin engine of 340cc. with desaxe (offset) cylinders, and direct belt drive from a small engine pulley to a three-speed epicyclic hub.

The small engine pulley put all the Humber down amongst the "also-rans" in their first lap, for the pouring rain and flying mud put all the belts out of court. As their engines were all racing, the jockeys got mixed up about lubrication; some overdid the oiling business, sooted up plugs, and fouled valves; others underoiled, and got their bearings somewhat parched and scrappy. In 1911 a Humber won, and its time was 9 minutes and 52 seconds faster than the Douglas did this year. However, the roads were much worse this year, especially on the first lap, when Bashall was 7 minutes slower than the 1911 winner was on his similar lap. Given a fine day, the Douglas and Humber machines would have fought out a positively terrific duel, probably with four or five representatives of each team inside a minute of each other. With a fine day next year the Junior Race should afford a stupendous contest of the ding-dong, ten-men-under-a-blanket type. However, if the two-step transmission gave the Douglas a soft win this year, it is none the less one of the best. I know its running by heart. Thanks to its transmission, you can rely on a complete absence of belt troubles, and there is no engine in the world which can do its 3,000 revolutions a minute with less fuss. The top gear ratio of the standard roadster is no higher than $5\frac{1}{2}$ to 1; on this gear I can at any time do 45 miles an hour, whatever the

condition of the engine; and if everything is dead right, I can scrap a standard $3\frac{1}{2}$ h. or 5 h. in good condition, and hold my own on all ordinary roads. It's a genuine little hopper, and it owes its excellence to the splendid efficiency of the engine balance attained by scientific application of the horizontal-opposed principle. Larger engines of the same design and make are used by the Marconi Co. for wireless telegraphy, and Mr. Douglas has just mounted one of these 8 h. water-cooled twins in a diamond frame, and is marketing it for side-car work, where it fills the bill no end.

The 1913 T. T.

I DARE say American manufacturers will hold aloof from our 1913 races, partly because they can sell as many machines as they can make on their home market, partly because it is a tough proposition nowadays to compete with the advanced British industry on its own soil; but we do hope that some of your amateur speedsters will take a European holiday next summer, and give us all a bit of a flutter. The 1913 plans are as follows: If the manufacturers' association supports the race, it will be repeated in the Isle of Man. If they again abstain, we shall have to put on our thinking caps and wait for brain waves, as we lose a lot of money over a race that has no trade entries at a hundred dollars a wheel or so. In that case, we shall probably cross the Straits of Dover, and obtain leave to race over some handy course close to the French coast. If we do that, we can expect 50 or 60 French, Dutch, German and Austrian entries, and we should get a truly international race; by the way, such a race would be worth attention from your makers, as the continental motorcycles are a sorry lot just now, barring the German N. S. U. We don't want to go to France, as they have no steep hills there, and this is such a hilly country, that a mountainous course is desirable in our interests; but I think that on the whole we shall be driven over the Channel. If we are, we shall plump for a two-day race, 400 miles in all, with machines under lock and key overnight, and only tire replacements allowed next morning. We may append two shorter races, one for 7 h. machines drawing side-cars and passengers, and the other for cyclecars, a new type of light four-wheeled carette, with an air-cooled engine not exceeding 1,000cc. weight limit of 6cwt. and price limit of \$500. Such a race week would be well worth a steamer trip, and I think I would back America to win the side-car race if she went all out; your 7 h. lines strike me as better than our native products.

A British Type of Carrier.

IN view of the recent carrier competition conducted by MOTORCYCLE ILLUSTRATED American riders may be interested in the appended cut, which shows the type of carrier fitted to most of our machines. The stand is a separate item fitted to lugs on the chainstays, and therefore capable of supporting the machine when the back wheel is removed to change a cover. The carrier is formed of stout tubing with brazed joints, and flat crossbar; it is sufficiently strong to carry a passenger seated on a cushion, and is so centered that the weight is all carried vertically, and concentrates on a lug brazed to the rear forks. This enables a single bolt to hold the carrier and its contents to the rear fork bridge, just below the

saddle, and when a complex tire repair is in progress, this bolt is pulled out, and the carrier dropped backwards on to the road, thus leaving the top arc of the tire accessible for the repairs, which can now be attempted without the rider getting a kink in his vertebrae. The standard equipment consists of two small pannier toolbags, long and narrow, attached to the side tubes of the carrier by short belts, held by D nuts against bent steel plates, a mode of attachment that cannot under any circumstances vibrate loose. The heavy tourist further attaches a large kitbag to the top of the carrier, and in extreme cases, a pair of large V pannier bags are also bolted to the sidelegs.

MAKING A PIERCE FRAME.

AN unusually interesting view in the frame department of the Pierce Cycle Company's factory at Buffalo is given in the accom-



panying photograph. It shows a Pierce expert at work on a frame for one of the company's single-cylinder models. Attention is called to the strength of the flange construction; the rivet heads may be plainly seen.

REX SPARK PLUG.

AN improved spark plug, manufactured by the Rex Ignition Manufacturing Company, of 1779 Broadway, New York City,

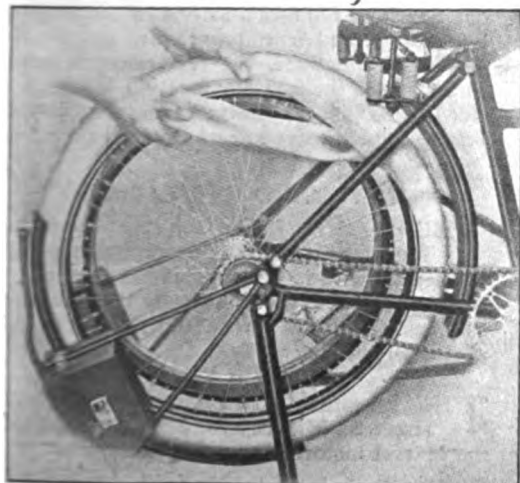


which has been on the market for the last two months is rapidly coming into favor with motorcyclists and the makers already find it one of their most satisfactory sellers. It has double insulation, and being absolutely soot-proof it cannot short circuit. The wire used in this plug is of the imported "meteor" brand which is guaranteed against burning out. The Rex plug is supplied with a combination top nut which may be used on any make of machine.

FOREST RANGERS in Porterville, Cal. are hereafter to patrol their ranges on motorcycles instead of ponies. With the motorcycle the ranger will be enabled to cover between 150 and 200 miles a day while 50 miles daily was his best average on the pony.



An English Detachable Carrier.



HOW APPLEBEE WON SENIOR TROPHY

Ability of His Scott to Hold the Road Gave Him Small Lead Over Haswell—Variable Gears Proved Their Value—Dissatisfaction Over Manufacturers' Agreement.

ENGLAND has recovered the handsome silver Tourist Trophy, which the Indian machines carried off to their bungalow in such convincing fashion last summer. At the last moment Oliver C. Godfrey, last year's winner, scratched from the race, partly because his nerve is weakened by a taxicab smash, partly because he is troubled by litigation over his tire retainers; and as Moorhouse (second in 1911) is dead, and DeRosier is in a hospital, the Indian team was distinctly weaker, and of the four machines to start, three secured the eighth, tenth and thirteenth placings, while C. B. Franklin, when riding fourth was stopped by the judges. He had a very nasty toss while crossing Snaefell mountain, and passed the grandstand with his oval front wheel lopping round eggily, and his bent forks inducing a permanent sway; the management decided that he was a danger to himself and the others, so much to his dudgeon they flagged him off the course.

Nevertheless the Indian defeat must not be taken too seriously. Two or three English firms have had a monopoly of racing success for many years past, and the disappointed rivals forced a bond on the manufacturers' association last winter, binding the signatories to abstain from the 1912 race. As a consequence the Hendee factory took no part in this race, the four Indian machines being entered by private individuals. The capacity allowed for twins was cut down by 85cc. and though last year's special racing machines were used, they were not sent to the Hendee people to be altered. Godfrey and Applebee of London (Eng.) hauled them up from the basement where they had reposed all winter, and cut down the connecting rods. This shortening of the stroke necessitated other modifications, *e. g.*, new cam contours, new valve areas, new flywheels, new timing, etc., and the slower speed of the altered Indians, as compared with that of the rivals they beat last year, shows that the work has not been properly done. At all events the Indians never looked like winning, neither did the famous brothers, Collier, who have always run high up in this race since its inception.

From the very first lap three men stood out from the crowd. One was an amateur, Haswell, who is a farmer near Rugby, and was using the same machine on which he did 63 miles in the hour on Brooklands track. He rode like a demon, and was easily faster than all the four-stroke twins; indeed his engine is probably the fastest $3\frac{1}{2}$ h. single that ever left a factory, but he was handicapped in the race by two factors. He obviously could not hold his machine straight on the downhill stretches where speeds of 70 and perhaps 80 m. p. h. were indulged in, and he could be heard cutting out where others were doing 3,000 revolutions a minute; and secondly, he began to hit the ground with his footrests at the many bad corners. Such low rests were an error of judgment, excusable only by the fact that wet weather during the practice week had made lurid corner-work perilous. However, there were two machines in the race that were even faster, the pair of two-stroke chain-driven twin Scotts, ridden by Philipp and Applebee. These two machines were possibly

no speedier than Haswell's on a straightaway track, but they have a marvelous knack of steady riding. They can be leaned over at a bend far more horizontally than any other machine on our market, and on rough stretches they stick to the road like a postage stamp, where other machines bounce and wobble. As a good deal of the road was vile to a degree, the Scotts were able to keep going all out where others slowed down. Probably their open frames give a little at the center, and take off bounce, while they carry both engine and tanks and gear-box, piled together in the center of the wheel-base, and so get a low center of gravity. At any rate they soon drew well out from all the four-stroke crowd, and if Philipp had not burst a tire on his last lap, they would have soundly thrashed the entire entry.

Behind this trio the two Colliers were running steadily and well, but were too slow to win, and dropped a minute or two apiece with stops due to overhead valve springs. When Franklin was out of the way, owing to his fall in trying to catch up to the Scotts, the Indian team had no class jockey left, and three more Triumphs showed the speediest Indian the way home. After the race Billy Wells, the Hendee company's London manager, said grimly, "No more bonds for us," and it may be taken for granted that the Indian wigwam will itself superintend preparations for the 1913 race; its riders this year were not factory representatives, and received no factory aid.

The race was not remarkable for incidents. A record was set up in that all the 41 starters managed to complete the first lap. Hugh Mason's machine caught fire at a replenishment depot when he was riding fourth, but was extinguished with sand; riding on he got in a rut crossing the mountain at 75 m. p. h., wrenched his front tire off, was flung over his handlebars into the heather, and picked up winded but otherwise unhurt. Three of the 340cc. machines from the Junior Race of the previous Friday completed against their big sisters; one fell out, but the other two finished fifteenth and seventeenth, thus defeating more than half the entry. These tiny Douglas machines are tremendous goers, but would have no chance on a straight road or a track. They scored by their nippiness round the corners, and indeed might have won if there had been no mountain in the race. Of course, with their small engines they were slow up the five-mile climb. None of the water-cooled four-stroke engines did any good; the race proved that air cooling is good enough on a road where the gradients prevent a very high compression being used. All the machines had variable gears, and the crack riders used them at every bad corner; the average top ratio was about 4 to 1, and a 6 to 1 ratio would be snickered at a cutting-out bend, so that the machine would accelerate again with a roar. Those who used three-speed hubs disconnected the bottom ratio, and ran on top and normal. The Scotts use a countershaft two-speed gear with friction clutches.

Tires gave a great deal of trouble, largely ascribable to scraping at the corners; genuine punctures were rare. Fortunately for the belt-driven machines the day was fine and dry,

otherwise the Scotts and Indians (chain drive) and the Douglas (combined belt and chain) would have had the finish to themselves. In all probability next year's race will be a two-day affair, planned to further test reliability, and the distance may be increased to 400 miles. Whether the Isle of Man will be the venue or not, is uncertain; the race is very expensive, and it is known that fifty or sixty continental entries could easily be secured if a French course were adopted. On the other hand the inclusion of a really bad hill is regarded as essential, otherwise variable gears will not be fitted, and the variable gear is in the forefront of development over here. In any case the American machines which compete next year will be up against a tough proposition, and may very likely have to face a truly international entry, as motorcycling is fast reviving in France, by infection from the English industry. We should like to see a few more machines as well as the Indian.

The race was run over a course of 187 miles, five laps of 37 miles each. There were many bad corners and Snaefell mountain necessitated a climb over poor roads of 3,500 feet. The winner's average speed was 48.69 miles an hour. The race was limited to machines not exceeding 500cc. The order of finishing was as follows:

	H.	M.	S.
1. F. A. Applebee ($3\frac{1}{2}$ Scott two-stroke twin).....	3	51	3
2. J. R. Haswell ($3\frac{1}{2}$ Triumph single).....	3	57	57
3. H. A. Collier (Matchless twin).....	4	1	56
4. C. R. Collier (Matchless twin).....	4	7	37
5. J. A. Hoffman (Triumph single).....	4	12	49
6. J. W. Adamson (Triumph single).....	4	14	2
7. A. Kirk (Triumph single).....	4	14	7
8. J. R. Alexander ($3\frac{1}{2}$ Indian twin).....	4	14	27
9. C. R. Martin (Triumph single).....	4	17	4
10. A. H. Alexander (Indian twin).....	4	21	1
11. F. Philipp (Scott two-stroke twin).....	4	25	34
12. W. Heaton (Dot twin).....	4	28	26
13. J. F. Sirett (Indian twin).....	4	29	24
14. H. Reed (Dot twin).....	4	31	32
15. S. L. Bailey ($2\frac{1}{2}$ Douglas twin).....	4	35	30
16. P. Butler (Triumph single).....	4	36	9
17. E. Kickham ($2\frac{1}{2}$ Douglas twin).....	4	39	41
18. S. F. Garrett (Regal single).....	4	49	13
19. T. F. Blumfield (Blumfield single).....	5	34	57

VISITOR FROM CALIFORNIA.

AFTER visiting the Pope Manufacturing Company's plant at Westfield, Mass., and conferring with the management there and at the executive offices in Hartford, Conn., regarding their plans for the immediate future, C. L. Smith, of Los Angeles, known throughout Southern California as one of the largest, best posted, and most progressive motorcycle dealers in the State, has just closed a large contract with the company for 1913, having decided to confine his efforts during the coming year to the exclusive sale of Pope motorcycles.

INCREASED FACILITIES.

THE Standard Roller Bearing Company, Philadelphia, Pa., has found it impossible to keep up with its orders and has been compelled to increase its facilities by the purchase and installation of over \$100,000 worth of additional machinery.

THE Edwards Cycle Company, 119 Sixth street S., Minneapolis, Minn., has added the Marvel motorcycle to their line.



AT Alameda, Cal., July 4th, Jno. J. Swanson, riding a regular stock 7-8 H.P. Harley-Davidson twin with another passenger on the tandem, won the twin cylinder economy test by covering 5 miles on $9\frac{1}{4}$ ounces of gasoline. This is at the rate of 69.2 miles per gallon.

A WORLD'S RECORD

The twin Harley-Davidson with two passengers used less gasoline than did the single cylinder machine of another make with no tandem and only one rider, which won the single cylinder event in which no Harley-Davidson was entered.

For more than four years the Harley-Davidson has held the world's official economy record in spite of repeated concerted attempts of other manufacturers to break it. This latest victory at Alameda is not a surprise to us or to our riders and dealers. Everyone acquainted with the motorcycle trade knows full well that Harley-Davidson stock machines are, and always have been, the most economical motorcycles to operate by a wide margin.

HARLEY-DAVIDSON MOTOR CO.
247 C Street, Milwaukee

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

QUESTIONS and ANSWERS

IN keeping with the announcement made in the June 27 issue, introducing the first of a series of mechanical queries to be answered by motorcyclists, the Editor of the Questions and Answers Department presents below the most concise and accurate letters describing the "general design and operation of a carbureter." While definitions have been plentiful and always indicative of a working knowledge of the standard carbureter on the part of the writer, few of them have been clear or complete. Deficiency in one or the other of these qualities has barred a number of otherwise interesting letters from riders who knew their subject but failed to make the most of their descriptions.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be

awarded to the two readers whose replies are most thoroughly characterized by clearness, accuracy and brevity. A new question will appear in each issue. Answers will be published the second issue following the number in which each question is asked. For example, answers to the question originally published in the June 27 issue, and repeated below, will be printed in the issue of July 25. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York."

Question No. 2.—Describe, so that a novice will understand, the construction and functions of a spark plug. Answers to this question will be published in the August 8th issue.

FRANK

MERRITT

IN preparing their definitions not a few writers erred on the side of verbosity, giving a lengthy description which, while basically correct, would not convey a clear idea to the mind of a novice possessing little or no previous knowledge of the mixing device. The aim should be to give a full statement in the fewest words and the simplest language. In the opinion of the editor these requirements were most satisfactorily met by P. Lindemann, of 1487 Hoe avenue, Bronx, N. Y., and he has been awarded the first prize of five dollars. K. G. Evans, of 111 East Washington street, Elkhart, Ind., receives the second prize of three dollars.

Mr. Lindemann defined a carbureter and outlined its functions as follows:

The gas giving energy to a motor must be in a state of vaporization and also mixed with a certain quantity of air. These functions are performed by the carbureter or vaporizer, as it is also called. Generally speaking, the carbureter consists of two parts, the float chamber and the mixing chamber. The suction of the piston draws the gasoline, in the form of a fine spray, through a jet in the float chamber into the mixing chamber, where the auxiliary air is mixed with the gas vapor. This mixture is explosive and enters the cylinder.

The auxiliary air is admitted through an automatic valve or through a hand-operated shutter. The float is of shellaced cork or a hollow cylindrical ring surrounding the float chamber which, by floating on the gasoline, regulates the amount entering the carbureter from the tank, through opening and closing a needle valve.

QUESTION No. 1.

Define, briefly and accurately, the general design and operation of a carbureter.

The definition submitted by K. G. Evans is as follows:

The carbureter is the device which vaporizes the gasoline and mixes it with air to form an explosive vapor or gas. This mixture will produce power like gunpowder when compressed into a small space. While there are several forms of carbureters the main principle of action is the same in all. Gasoline reaches the carbureter through the feed-pipe by gravity, passing into the float chamber. As it enters, the float rises until the proper amount has been received, when the supply is cut off. The gasoline is then forced through a spraying nozzle into the mixing chamber where it is vaporized with the air that comes from the air intake valve, located at the top of most carbureters. The gas is now explosive and passes through the throttle valve to the cylinder to furnish power.

The following description, submitted by Charles C. Bott, of 3231 Washington avenue, St. Louis, Mo., is considered worthy of publication:

A carbureter is a cylindrical bowl containing a cork or metal float to regulate the height of the gasoline and the supply of the same to a spray nozzle. This float is either semi-circular or circular and its rise or fall operates a needle valve which controls the flow of the liquid.

The gas being formed by the mixture of air and the gasoline which escapes through the spray nozzle, is carried into the cylinder of the engine by the suction of the down stroke of the piston.

J. H. Wood, of Sibley, Mich., forwarded this definition, also regarded as worthy of consideration:

A carbureter, as used on motorcycles, is an appliance for atomizing gasoline and mixing it with air in proportions to form an explosive mixture. The main parts of a carbureter are the float chamber, spray chamber, and the mixing chamber.

The float chamber contains the float which operates a valve in the supply line and maintains a gasoline level at or near the top of the spray nozzle. The spray chamber, which is also the main air intake passage, contains the spray nozzle out of which the gasoline is sprayed by the suction of the engine.

The mixing chamber is an enlarged passage above the spray chamber and contains the auxiliary air valve. The gasoline and air drawn up from the spray chamber are here mixed with air drawn through the auxiliary air valve. This mixture is then ready to be taken into the engine.

MEASURING HORSEPOWER.

J. W. BUTLER.—While in general a motor with piston displacement superior to that of another motor will give off more horsepower, this is not invariably the case. The motor with smaller cylinder volume may have higher compression pressure and be designed to run at a higher speed than the other, so that

The Economy of Gargoyle Mobiloils

Lubricating oils "break-up" and thin out in use. In plain terms, they wear out. The better the oil the longer it wears.

In sheer wearing-qualities, Gargoyle Mobiloils stand alone.

Further:

Different types of motor demand different grades of oil. In Gargoyle Mobiloils we give you the one grade of oil best suited to your motor.

This increases power and further reduces the consumption of oil. It minimizes wear on the moving parts.

The life of your motorcycle depends on the reduction of friction. Is it not worth your while to insist on the oil that will reduce friction most effectively and most economically?

In price, Gargoyle Mobiloils are somewhat higher than ordinary motorcycle lubricants. But—

The cost per mile is low.

Gargoyle Mobiloils are the products of our experience as the world-wide leaders in lubrication.

In them we have set a new standard for motorcycle lubricants.



Gargoyle Mobiloils are put up in barrels, half-barrels, in 5 and 1-gallon sealed white cans.

All are branded with the Gargoyle, which is our mark of manufacture. They are handled by the higher class garages, auto supply stores and others who supply lubricants.

The various grades are named:

Gargoyle Mobiloil "A"

Gargoyle Mobiloil "B"

Gargoyle Mobiloil "Arctic"

You will find the correct grade of oil for your motorcycle in our list of recommendations—printed on the right.

VACUUM OIL COMPANY

Rochester, N. Y.

GENERAL SALES OFFICES, 29 BROADWAY, NEW YORK CITY
DISTRIBUTING WAREHOUSES IN THE PRINCIPAL CITIES OF THE WORLD.

This list shows the right oil for your motorcycle.

Explanation: In this schedule the letter opposite the name of motorcycle indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." Recommendations cover all types of the same make unless otherwise stated.

MODEL OF MOTORCYCLE	1908		1909		1910		1911		1912	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
American.....	B	B	B	B	B	A	B	A	B	A
Apache.....	B	A	B	A					B	A
Armac.....			B	A					B	A
Arrow.....									B	A
Augustin-Koch.....									B	A
Aurora.....									B	A
Auto-Bi.....	B	A	B	A					B	A
Black Hawk.....									B	A
Bradley.....									B	A
Breed.....									B	A
Crouch.....	B	B	B	B					B	A
Curtiss.....	B	A	B	A	B	A	B	A	B	A
C. V. S.....	B	A			B	A	B	A	B	A
De Luxe (1 cyl).....							B	A	B	A
De Luxe (2 cyl).....							B	A	B	A
Detroit.....							B	A	B	A
Detroit Bi-Car.....					B	B	B	B	B	B
Eagle.....									B	A
Electra.....			B	B	B	B	B	B	B	B
Emblem (1 cyl).....					B	A	B	A	B	A
Emblem (2 cyl).....							B	A	B	A
Erie.....	B	B	B	B	B	A	B	A	B	A
Excelsior (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Flanders.....									B	A
F. N.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Geer.....	B	A	B	A	B	A	B	A	B	A
Gerhart.....									B	A
Greyhound.....					B	A	B	A	B	A
Harley-Davidson.....	B	A	B	A	B	A	B	A	B	A
Haverford.....							B	A	B	A
Hilaman.....	B	A	B	A					B	A
Henderson.....									B	A
Indian (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Indian (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Iver Johnson.....									B	A
Kokomo.....									B	A
Majestic.....									B	A
Manson.....	B	B							B	A
Marvel.....					B	B	B	B	B	B
Mayo (1 cyl).....	B	B								
Mayo (2 cyl).....	B	A								
Merkel.....	B	A	B	A	B	A	B	A	B	A
Minerva.....	B	A	B	A	B	A	B	A	B	A
Minneapolis.....			B	A	B	A	B	A	B	A
M. M.....	B	A	B	A	B	A	B	A	B	A
Monarch.....									B	A
Motorette.....									B	A
New Era.....			B	A	B	A	B	A	B	A
N. S. U. (1 cyl).....	B	B	B	B	B	B	B	B	B	B
N. S. U. (2 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless.....									B	A
P. E. M.....									B	A
Peugeot.....	B	A	B	A	B	A	B	A	B	A
Pierce (1 cyl).....			B	A	B	A	B	A	B	A
Pierce (2 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pope.....							B	A	B	A
Racyle.....							B	A	B	A
Reading Standard.....	B	A	B	A	B	A	B	A	B	A
Reliance.....	B	B	B	A	B	A	B	A	B	A
Royal.....	B	B	B	A	B	A			B	A
Schickel.....							B	A	B	A
Scott.....									B	A
Thim.....	B	A	B	A	B	A	B	A	B	A
Thor (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Thor (2 cyl).....	B	B	B	B	B	B	B	B	B	B
Torpedo.....	B	B	B	B	B	B				
Triumph.....	B	B	B	B	B	B				
Wagner.....	B	B	B	B	B	B	B	B	B	B
Yale (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Yale (2 cyl).....					B	A	B	A	B	A

the power output would be greater in spite of the difference in piston displacement. Again, of two motors of equal bore, stroke and piston displacement but different compression pressure, that with the higher compression pressure would probably give off the greater power and be the faster motor of the two. Examples of this will be seen in the "stock" and racing models of various makes of motorcycles, where the racers (with the higher compression pressures) give off more power and run at higher speeds than the "stock" motors. Of course the lightening of the moving parts makes for a good part of the increase in speed, in addition.

The measuring of motors by piston displacement and examination of the parts for drilling is good as far as it goes. But with an increase in compression pressure an increase in speed is generally attained, hence neglecting this important factor would enable a smart rider or mechanic to enter a high compression machine in a contest and remain smilingly confident that the motor would be declared "stock" on the measurement of its piston displacement only. There are a number of methods of determining the compression pressure; one is by the use of a gauge graduated to suit and fitted with connections to go in the spark-plug aperture. Another is:

Take a measured quantity of snipe or other small shot and find the weight per ounce and per cubic inch. Place the whole quantity of shot in a can, weigh the can and shot, and removing the valve cap or dome pour in shot until the combustion chamber is full. The motor must be on compression dead center, so that no valves are open before this is done. Stir the shot about in the chamber with a small rod. Now weigh the can with the remaining shot. The difference between the weight before filling the chamber and after filling the chamber will give the weight of shot used, and as the weight per cubic inch of shot is known, the cubical contents of the chamber will be found. To get the compression ratio use this formula:

$$\frac{P+p}{p} = r, \text{ when } P \text{ is the piston displacement, } p \text{ the volume of the combustion chamber and } r \text{ the ratio.}$$

The ratio having been found, multiply by 14.7 pounds, obtaining the compression pressure.

Example; $P = 30$ cubic inches, $p = 5.5$ cubic inches. Then $r = 30$ plus 5.5 divided by 5.5, or 6.45. Multiplying this by 14.7 we get 94.81 pounds compression pressure. The example is taken arbitrarily; practically no air-cooled motor would have such a high pressure, as pre-ignition would soon occur at such figures.

TIRES AND GEARS.

R. C. DALLEY.—(1) A chain will prevent skidding on practically all kinds of slippery surfaces, hence its use is desirable, especially when the rear tire has its tread (with studs, etc.) worn or is a smooth tread tire. (2) The larger the tire on any motor vehicle the greater the economy, as the load carried by the big tire is less in proportion to its maximum load than is the case with the smaller tire. That is, if a tire is designed to sustain the load of a 200-pound machine and 200 pounds of load are put on it, it will wear out in a given time; whereas, if the tire used is for a 300-pound machine, the tire will last very much longer under the 200 pound load. Again, the casing being heavier and thicker, puncturing will be less likely. The first cost

of the larger tire will be greater, but the final cost will be less and should repay the purchaser in fitting the larger tire.

(3) There is at present no hub variable gear device on the American market, and we do not know where one for a 7 h. machine can be obtained. Write the Armstrong Three Speed Gear Works, Icknield street, Birmingham, England, or the Sturmey-Archer Gears, Ltd., Nottingham, England. Write for prices, etc., these firms make hub gear devices, but we doubt if they make any for machines as powerful as 6 or 7 horsepower.

A FAMILY MACHINE.

GUY PECK, of Los Angeles, Cal., argues that his wife and the kiddies are entitled to a share in the enjoyment he derives from his Excelsior 6, and as a result he has



worked out a system by which the whole family is accommodated on the machine. Peck states that trips are made almost daily to points in and near the city, and that every fine Sunday finds him piloting his heavily laden machine into the country for a picnic. On more than one occasion of late sixty miles have been covered in a day without difficulty.

THEY USE THE JONES.

G. L. HOLMES, general manager of the Jones Speedometer is elated over the receipt of a letter from Captain A. J. Stiles of the Chicago police department to the effect that he has tried various makes of speedometers in order to determine which is the



most accurate and that he has chosen the Jones. The captain further informs Mr. Holmes that he has equipped his motorcycle squad with Jones speedometers.

The police departments of many of the larger cities in America and Europe use Jones speedometers.

MAGNETO CUT-OUT.

W. DROEGE.—Using the cut-out simply short-circuits the primary windings of the magneto and the armature will be rotated

idly (that is, without generating high-tension current). It is not likely to damage the magneto if used with discretion, and in a great majority of cases no matter what the amount of usage. There are a number of instances where magnetos fitted with cut-outs have been used on racing motors for nearly a year without apparently affecting the machine in regard to current output, etc. Of course it depends on the magneto and the workmanship entering into it as to how long it will last.

MOTOR SUSPENSION.

K. E. EVANS.—You would be very rash to attempt to support a motor by the cylinders alone. The result of such suspension would be the tearing away of the crankcase and its contents, with possible damage to the rider. Cylinders are made of cast iron, while the crankcase is made of aluminum or an aluminum alloy that is strong enough to take care of all shocks due to the explosions in the cylinders, something that the cylinders are not capable of unless supported by the crankcase. By supporting the motor by the cylinders you would depend on four or more bolts only, whereas you now have a big bearing surface on a stout crankcase to take the thrust of the connecting rods, etc. Cylinders are only attached to the frame to prevent lateral motion of the motor, it having been found that in many frames the bearers on the crankcase were not sufficient to prevent side-wise rocking of the motor.

TWO-SPEED GEAR QUERY.

A READER, California.—There is no two-speed device on the market, nor as far as we can find out in existence for a flat-belt machine. The belt two- and three-speed gears are made for V-belt only and are practically all European-built. The flat belt is not used abroad at all; the V-belt is used in the majority of cases, and the chain in all but two (F. N. and T. M. C.), which use the shaft. The N. S. U. device is for V-belt only. There seems to be no reason for thinking that such a device, when used with either a V- or flat belt, would overheat the motor at all. If you desire a two-speed device at present, you will probably have to transform your mount to a V-belt or chain machine.

CLASSING 30.50 TWINS.

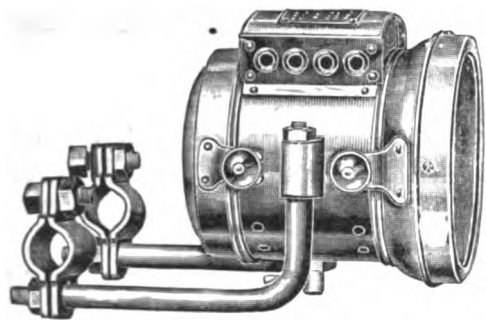
NEW YORK SUBSCRIBER.—There is no specification in the present Competition Rules against the use of a 30.50 cubic inch twin in contests where the limit is 30.50 cubic inches. There are no twins of this displacement made in this country at present, as far as we know. The subscription to the *Motor Cycle* is \$2.50, and is best obtained through the International News Co., 85 Duane street, New York City.

ILLINOIS AND MISSOURI LICENSES.

PAUL AMBUEHL.—For an Illinois license write the Secretary of State, at Springfield. The fee is \$2. For Missouri riding you can use your Illinois license and get exemption as a non-resident for a period of 20 days per year. See the *MOTORCYCLE MANUAL*, pages 46 and 48, for further information.

MINERVA PARTS.

J. G. CLARK.—The Minerva motorcycle is of Belgian manufacture and is made at Herstal-Lez-Liege, Belgium. The firm's name is Minerva Motors, Ltd. To the best of our knowledge there are no American agents. Parts can sometimes be obtained from Campani & Cocchi, 2142 Broadway, New York.



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20th Century Searchlights are renowned for their great light giving qualities. Their patented construction, similar to the big naval searchlights, is designed to throw a most powerful ray directly in front, quickly revealing any object of danger a long way ahead in the rider's path.

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The Combined Lamp and Generator No. 6 is especially appreciated by those who desire the extreme of compactness. It is one of the handsomest lamps we make and has made many friends among the trade and riders.

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In every race meet in which the P.E.M. has been entered this year, its first season, this wonderful motorcycle has captured the big end of the first and second places. Just read this record—Deeds talk louder than claims.

JANESVILLE, WISC. — Big Decoration Day Meet. Six events; The P.E.M. took four firsts. In event 5, A P.E.M. "single" won by over 13 seconds a 10-mile race against a field of "twins."

MILWAUKEE, WISC., June 8th—The P.E.M. took first in novice, first in Private Owner and Second for Stock Machines (In this latter event the winner was a stripped machine with a trade rider).

OSHKOSH, WISC., June 9th—In Six events on a half mile track P.E.M. won five firsts and two seconds.

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High powered Engine because of high compression due to overhead valve mechanism. Positive chain drive with free engine clutch.

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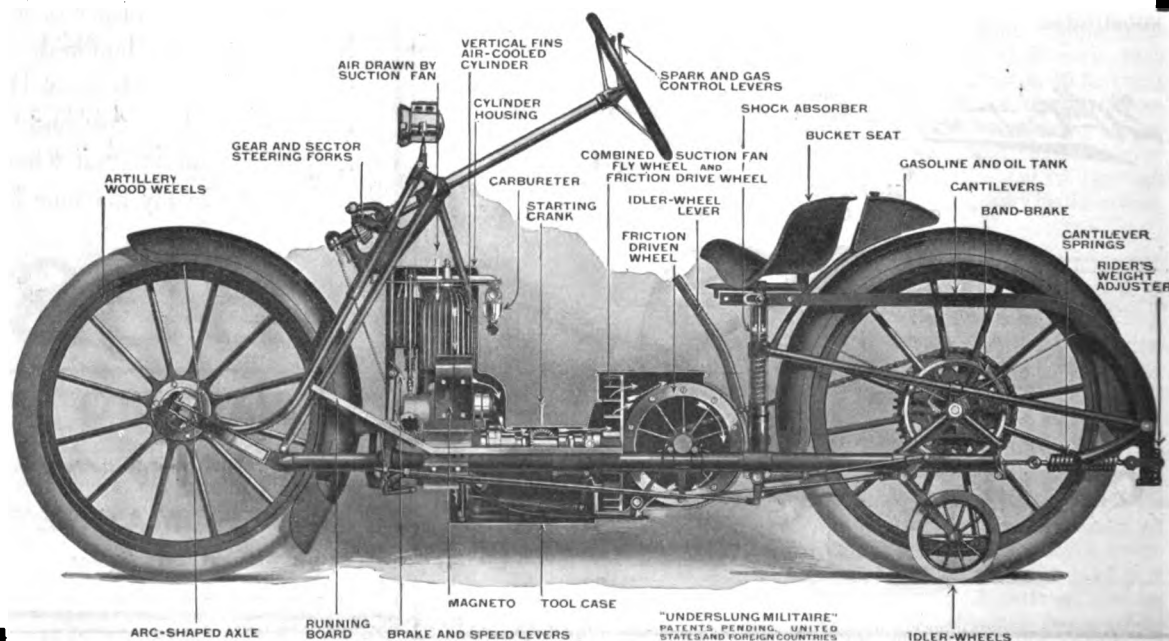
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CHICAGO PICNIC.

ONE of the most pleasant features of the first annual picnic and field day of the Chicago Motorcycle Club, held on June 29, was the interest manifested by the women riders of the city. Many of them accompanied the club as

tandem passengers and a few piloted their own machines. Over 150 enthusiasts participated in the program.

JOTTINGS FROM SAVANNAH.

SAVANNAH, GA.—There are indications that the long talked of road races under the auspices of the Savannah M. C. will be held on Labor Day. It is the intention to hold two events, for singles and twins, of 100 miles each.

The clubs in Augusta and Columbus, Ga., have suggested plans for a reunion with the Savannah boys to be held in August or early in September. The three clubs will ride to some town which may be reached over good roads and there enjoy a dinner and a program of games and contests.

Sales of motorcycles to be used for commercial purposes have recently received a boom in Savannah. The Pigman Pharmacy has purchased an Excelsior, the Knight Drug Co. is operating an Indian, the Savannah Lumber Co. uses an Excelsior and the Sykes Drug Co. is making deliveries with a Harley-Davidson.

TRENTON ENDURANCE RUN.

TRENTON, N. J.—The Central Jersey Motorcycle Club at its last regular meeting completed arrangements for a 200-mile endurance run to be held August 11. This event will be the first of its kind for the club. The route will be from Trenton to Pennington, to Ringoes, to Flemington, to White House, to Clinton, to Washington, to Beattystown, to German Valley, to Morristown, to Chatham, to Springfield, to Newark, and then back to Trenton via Elizabeth, New Brunswick, Old Bridge, Matawan, Freehold, Hightstown, Cranbury, Dayton, Monmouth Junction. The entry fee is one dollar. A number of attractive prizes will be awarded. The start will be made at 7 a. m. at the new reservoir in Trenton. An average speed of 20 miles an hour will be maintained.

GOING TO ATLANTIC CITY.

AT the last meeting of the Reading (Pa.) M. C. plans were laid for a run to Atlantic City, N. J., to be held August 10-11. The riders will leave the clubrooms at 1 p. m. on Saturday and return on Sunday evening. On Sunday, July 21, a number of the Reading riders went to Pottstown to practice on the track in preparation for the races to be held there on August 3.

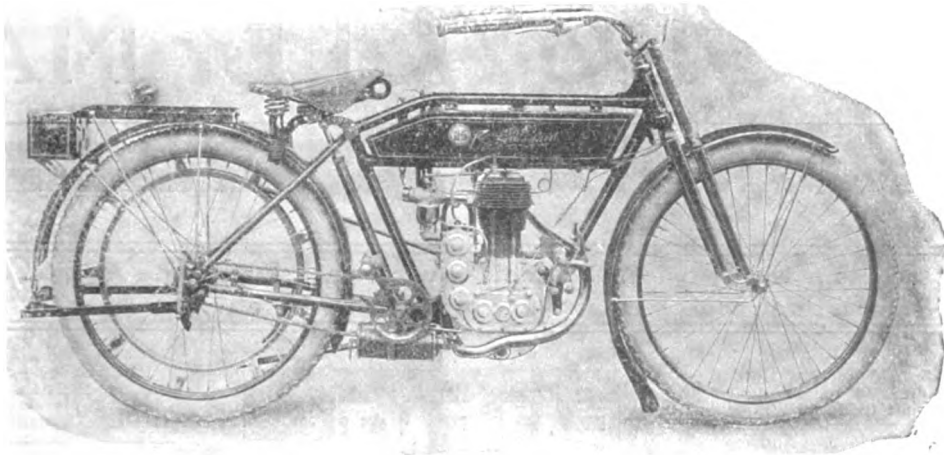
DIRECTORS OF C. M. A.

DIRECTORS of the recently organized Canadian Motorcyclists' Association which is making rapid progress in the rounding up of riders throughout the Dominion. In the top row from left to right are W. J. Cunningham, vice-president; Kenneth R. Spencer, president; Thomas I. Anderson, secretary-treasurer; Alex. McLain and Nelson Chambers. Those sitting, from left to right, are W. G. Tite, Fred Johnson, chairman of the Competition Committee; B. Wilhelm, William Gladish, T. Thornwaite and Jack Scott.

TANDEM DEMONSTRATIONS.

WITH a view to convincing the city officials of Washington, D. C., that the ordinance prohibiting the carrying of a woman passenger on a motorcycle is unreasonable, the National Capital Motorcycle Club is conducting a series of tests and exhibitions, using a Simplex spring tandem attachment. The club aims to demonstrate on a practical basis that no danger need attend the carrying of a passenger on a well-made tandem attachment, and there are indications that the objectionable ordinance will be revised.





There is no motorcycle on the market today that is so absolutely perfect in essential details as the R-S. There is no motorcycle on the market today that can successfully compete with the R-S in point of speed, durability and comfort.

We challenge a repudiation of this statement by any



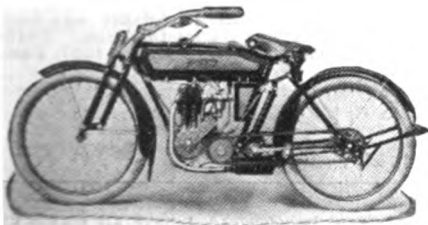
manufacturer, dealer, jobber or rider. We do not make racing machines, but we will put up any stock machine made by us against stock machine of any other make. We are seriously, solemnly and desperately in earnest about this and want to hear from anyone who thinks he has a machine of stock design that can "put one over" on the R-S.

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FOR SALE, CHEAP.—Wagner motorcycle, double grip control; Heltger carburetor; also frame with tanks and rear wheel and engine. For description and price write Blythe Hubbard, 819 Shepard st., Rhinelander, Wis.

WANTED.—Single-cylinder motorcycle motor, over 3 h., cheap for cash. Must be in good condition. Shannon B. Mitchell, Marshfield, Ore.

FOR SALE.—Thor twin-cylinder, good condition, with lamp, generator and luggage carrier. Address P. O. Box 806, Chickasha, Okla.

WANTED.—Machinist, with or without shop, for special motorcycle tubing work. J. R. Livingston, Asbury Park, N. J.

FOR SALE, CHEAP.—1912 Majestic side-car; used only one day. Same as new. To first buyer at \$40. Write to M. H. Rehrig, Chambersburg, Pa.

REBUILT MOTORCYCLES.—Great clearance sale. Prices reduced way below cost. Goods must be moved quickly for cash. Machines taken in trade for new M-M's. Indians, Curtiss, M-M's, and many others; singles and twins. Many as good as new and ready for instant shipment. Rare opportunity to get high-grade mount for very small investment. Send today for Bulletin No. 61. American Motor Company, 716 Center st., Brockton, Mass.

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1912 MAJESTIC SIDE-CAR for Pierce single or other make. Never used; account of death. \$50 for quick sale. P. Franck Schock, Mount Joy, Pa.

MOTORCYCLE TIRE BARGAIN!—A. C. C. A. prices talk! Diamond, Goodrich, G. & J. and other standard makes, guaranteed: Gridiron, Basket and Bailey Threads; 28 x 1 1/4, \$3.00; 28 x 2 1/4, \$5.70; 28 x 2, \$4.95; 28 x 2 1/2, \$6.20; 26 x 2 1/4, \$5.45; 26 x 2 1/2, \$6.20. Guaranteed. Tubes priced proportionately low. Shipped on approval. Don't buy until you receive our price list! The Automobile and Cycle Company of America, Dept. X, 1769-1787 Broadway, New York City.

FOR SALE.—One 1911 Reading Standard single; belt drive; gas lamp and tank; \$125. One 1912 Henderson 7-h. demonstrating machine; \$250. Melrose Motorcycle Agency, 427 Main st., 111 First st., Melrose, Mass.

MOTORCYCLE WANTED.—I have a Model 10, two-passenger Buick, four-cylinder with magneto. All new tires; newly painted. All equipped. Sell, \$325, or trade for good motorcycle. 18 Cherry st., Danvers, Mass.

HARD UP!—F. N. four-cylinder, cost \$385, sell \$125. Rare bargain. Box 191, Salem, Mass.

WANTED.—Automobile top suitable for two-passenger car, and cushion. Must be cheap for cash. A. A. Jordan, Lumpkin st., Athens, Ga.

FOR SALE.—Yale motorcycle, belt-drive, loop-frame, new 28 by 2 1/4 tires. Price \$45. Must sell at once. \$10 deposit. Ship C. O. D. Earle S. Eckel, Washington, N. J.

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BRUSH CAR, \$485 model; 30-inch wheels, with top and wind shield, in perfect order; \$200 cash, or will trade for motorcycle. Dampman, 255 Broadway, New York City.

FOR SALE.—Late 1911 Excelsior twin; Eclipse clutch, Presto tank, Solar lamp, tandem attachment, luggage carrier, extra belt; price \$175. R. Zenner, Grantwood, N. J.

1912 HUPMOBILE RUNABOUT, fore-door model; fully equipped. Must sacrifice for financial reasons. Cheap for cash or would take motorcycle as part payment. H. L. Sargent, Salem, Mass.

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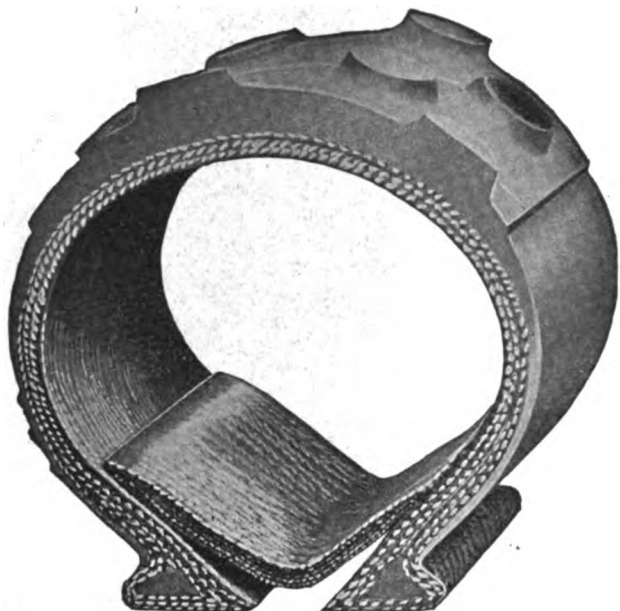


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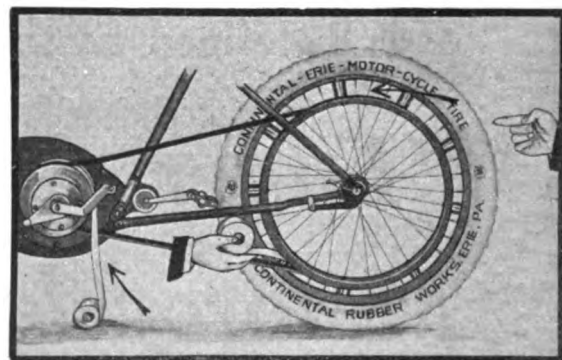
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Doubles the life of the belt and adds
25% to the life of the machine

NON-SLIP-LAG is the new lining for pulleys. It absolutely prevents belts from tearing and slipping; increases their life and affords additional power. Non-Slip-Lag is being used exclusively by the Eclipse Machine Co. for use on the Eclipse Free Engine Pulley.

About Continental-Erie Goods
Ask Your Jobber—He Knows

DEPT. T

CONTINENTAL RUBBER WORKS, Erie, Pa.

New York Branch, 35 Murray St. · Chicago Branch, 131 N. Canal St.
Cleveland Branch, 1551 Columbus Road, N. W.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



I AM HAPPY—I am smiling. I am the vanquisher of darkness. Perched on your handlebars, I beam out into the night and lo! the darkness flees before me.

I unerringly guide you through rain and storm. I point to the rough bumps, the treacherous ditches. I warn you in time.

The powerful gleam of my smile goes far ahead, cutting through the darkness like a knife.

I am well made. My frame is made of heavy gauge brass.

My face is a Mangin Mirror lens, accurately ground to my maker's specifications.

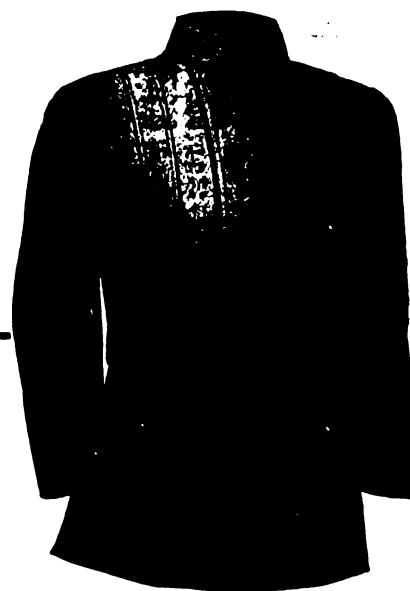
I do not rattle or jar loose. I grip my seat firmly, no matter how fast or how roughly we are going.

I have many brothers—some stronger and some not so strong. My big brother, "Old Sol" No. 8, has a light throwing capacity of 1,500 candlepower.

I am the motorcyclist's ideal lamp.

Hawthorne Mfg. Co., Inc.
BRIDGEPORT, CONN. U. S. A.

Pollock Mfg Co., Ltd.
BERLIN, ONT.



How Do You Look on a Motorcycle?

Are you thoroughly satisfied with your appearance? Is your suit all that you think it should be? Does it fit well? Is it comfortable? Was it made to **your** measure? Does it wear well? If you can't answer these questions satisfactorily, it's time you knew more about

AURORA
MOTORCYCLE  **CLOTHING**
BRAND

Strength in Every Fibre Quality in Every Thread

Aurora Brand clothing is made to fit you. Durability, style, fit and comfort are our "long suit." Made to withstand the hardest kind of service.

The illustration shows our natty, comfortable and durable Norfolk cut coat. It can be made to your measure in the latest style and in the following materials:

English Roseberry, English Whipcord, Fustian, Petrels and Khaki.

Dealers—get on the "Aurora" wagon—the selling's fine.

Fowler-Carnes Company
Aurora, Ill.

IS ANYWHERE UNDER ANY CONDITION

T In knowing you can
H go WHEN and
E WHERE you
R please?

E In riding comfort-
ably?

A In not having to
stop for repairs?
N In owning a motor-
cycle that re-
sponds to your
every wish?

S In riding a motor-
cycle that is chuck
A full of energy?

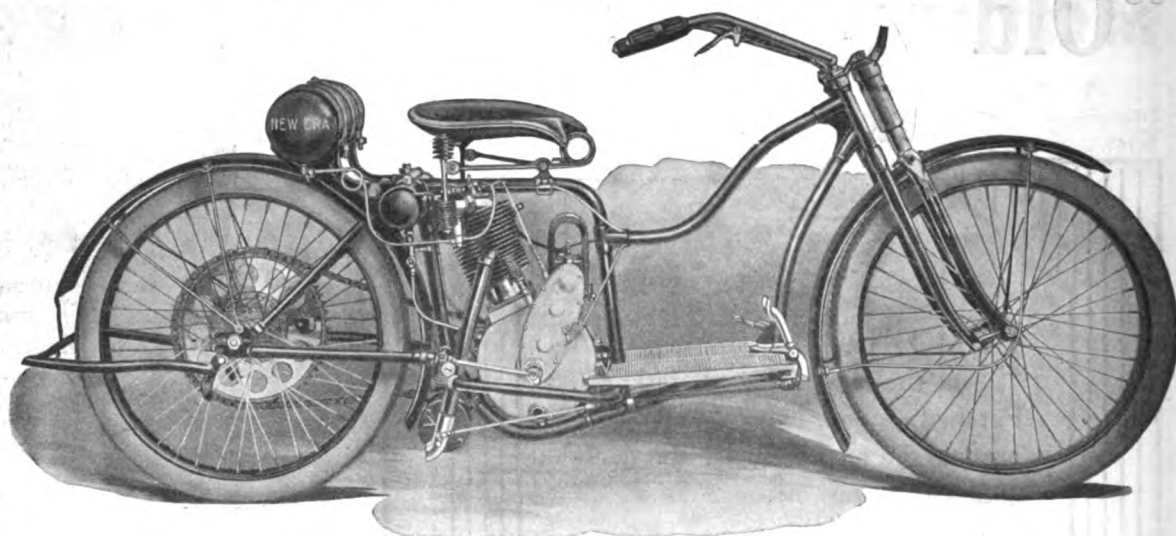
T In knowing that you
have the very best
motorcycle that
money can buy?

I We build machines for the man who requires all of these. Write for Agency proposition.

S For the man who is critical. For THE MAN WHO KNOWS.

A This year's model of THE NEW ERA satisfies a long-felt want in the motorcycle world. LET US SEND YOU OUR CATALOGUE.

C **T** **H** **E** **N** **E** **W** **E** **R** **A** **A** **U** **T** **O** **-** **C** **Y** **C** **L** **E** **C** **O** **.,** 22 Dale Ave., Dayton, Ohio



4 H. P. ROADSTER.

We Can Deliver a Majestic Side-Car to You Immediately

And it will give you the same service as it does to these satisfied users

PROVIDENCE, R. I.

MAJESTIC MFG. CO.,
Worcester, Mass.

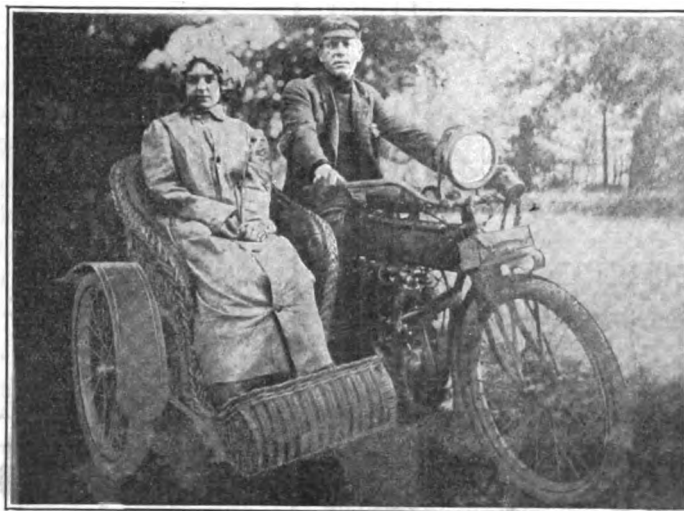
GENTLEMEN:—Your letter of June 13 is at hand and contents noted. The Side-cars are becoming very popular here and a great many will be sold. Today is Tuesday and my men are now fitting a Majestic to an Indian motorcycle, and that's the second Majestic I have sold this week. I have no more in stock now, so please hurry deliveries on orders I have on file and at the same time ship me another Red Car for Indian machine. The Side-car I used for demonstration proved very handy to me during the time I have been moving to my new location.

One instance I will mention when I carried six men from old store to new building, two sitting in Side-car, one on saddle, one on rear carrier, one standing on each footboard of the T. T. Indian I use for Side-car regularly.

I am planning to take a Side-car over the roads to Columbus, Ohio, to attend the F. A. M. meeting, and I am looking forward to a very pleasant trip.

Yours very truly,

B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

MAJESTIC MFG. CO.,
Worcester, Mass.

DEAR SIR:—Some time ago Waking & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

I am enclosing small photo of myself and lady friend taken in one of our city parks. You may keep this photo or tack it on a fence, or you can use it in your advertising.

I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

If you care to, you can fix it up to suit yourself and use it for advertising. It will be all right with me.

Yours truly,
CHAS. A. TAYLOR.

THE BIGGEST BUSINESS BRINGER IN THE MOTORCYCLE FIELD

Orders taken from Live Dealers for prompt shipment in Standard Colors.

Write today and state your requirements

"DON'T FORGET THE GIRL"

MAJESTIC MANUFACTURING CO., WORCESTER, MASS.

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

FIRST QUALITY GUARANTEED MOTORCYCLE CASINGS REDUCED

As is generally known in the automobile trade the policy of the U. S. Tire Co. is to eliminate all the old brands such as "Hartford," "G. & J." and "Morgan and Wright" and concentrate under a single brand—"U. S." The makers have decided to follow the same plan in marketing their Motorcycle Tires and so sold us all their new casings branded "Morgan & Wright," made for sale this year and backed with their usual liberal guarantee.

1912 Morgan & Wright Brand, U. S. Tire Co. Make

Single Clinch—Guaranteed		
Size, Inches	Basket or Corrugated	Bailey or Tourist
26 x 2 1/4	\$6.55	\$6.80
26 x 2 1/2	7.00	7.25
28 x 2	6.40	6.65
28 x 2 1/4	7.05	7.30
28 x 2 1/2	7.50	

Double Clinch—Guaranteed		
Size, Inches	Basket or Corrugated	Bailey or Tourist
26 x 2 1/4	\$6.80	\$7.05
26 x 2 1/2	7.25	7.50
28 x 2	6.65	6.90
28 x 2 1/4	7.30	7.55
Note—2 1/4 in. size fit 2 1/2 in. rims.		

Backed by the Guarantee of the Largest Makers in America

While our price is low, the guarantee is just as liberal as if you had paid the full price. Make claims (if any) direct to the U. S. Tire Co. in New York or any of its branch offices, which are located in every large city in the United States. Ask for prices on Racing Weight Casings.

May We Send Our 1912 Motorcycle Supply Catalog No. 52S?

NEW YORK SPORTING GOODS CO.

15 and 17 Warren St., Two Entire Buildings, Near Broadway, New York, N. Y.

Oh, You Monarch!

"The Big Single with Twin Power"

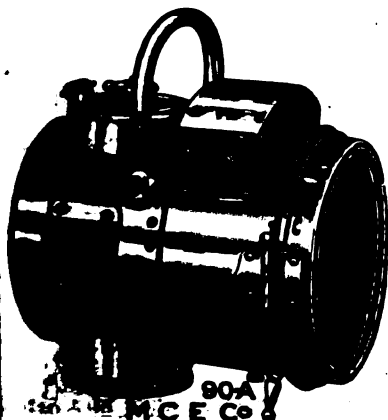
Makes it to Columbus with Perfect Score

Telegram

NY 8 Ma 21
Columbus, Ohio, July 17, 1912.
Ives Motorcycle Corporation,
Owego, N. Y.
Rizika and Roth two Monarch riders arrived at Columbus Ohio
with perfect scores from Albany, N. Y.
(Signed) R. J. 8:12 A. M.

Many's the time Roth and Rizika stopped to give a helping hand to some poor twin that couldn't take the grade. But the Monarch breezed along and kept the tourmaster hustling to keep the lead. Write for our catalog.

Ives Motorcycle Corporation
Owego, Tioga County, N. Y.



An Ideal Motorcyclists' Lamp

With a "Close Coupled Searchlight and Generator" Combined; Nickel Plated throughout, complete in every detail. No. 90 Rear Prop. No. 90A Side Props. List price each, \$6.00.

Get it from your dealer.

MOTOR CAR EQUIPMENT CO.
55 Warren Street Dept. M NEW YORK

"We use thousands of Diamond Chains with absolute satisfaction and believe they are the best made in this country."

That's what the Consolidated Mfg. Co., of Toledo, large manufacturers of bicycles and motorcycles, have to say of Diamond Chains and they know from long experience.

Diamond Chains are and have for 21 years been the recognized standard and have been adopted as such by bicycle makers whose product is of the highest grade. Doesn't this warrant a trial on your part? See that the Diamond trade mark appears on the connecting link when you buy a new chain.

TRADE  MARK

Diamond Chain & Mfg. Co.

227 W. GEORGIA STREET, INDIANAPOLIS IND.
8,000,000 Feet Per Year



BETTER SERVICE
VALUE
PRICES

"MASCO TIRES

ACCESSORIES

SUNDRIES

CLOTHING

MANUFACTURERS
DISTRIBUTORS
JOBBER

O"ILS

ASK FOR CATALOG

You'll like MASCO goods
and MASCO service

MOTORCYCLE ACCESSORIES CO.
ST. PAUL, MINN.



YOU will forget this advertisement in a day or so but our catalogue will be of use all the year.

We furnish these books to dealers free. This is one of the ways we assist our agents to sell our belts.

Do you want to learn more?

Chicago Belting Co.

124 N. Green St.

Chicago

New York

New Orleans

Portland, Ore.

Satisfaction Guaranteed or Money Refunded on Any of Our Motorcycle Accessories

WE HANDLE NOTHING BUT THE BEST, NO UNTRIED NOVELTIES

WRITE TODAY FOR CATALOG. GET OUR SPECIAL OFFER ON WATER PROOF BELT CEMENT "SUN BRAND"

THE SUN MOTOR AND SUPPLY CO. 307 Amsterdam Ave., NEW YORK



ARE you troubled with belt slipping, Mr. Rider? Do the screws in your lagging cut grooves in your belt? We can overcome this for you, also prevent your belt from getting glossy. The only cure today is

ABESTO PULL-E-TAPE

Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape! 50c per Roll—send for some today and save your belt State width

KRAFT KNITTING COMPANY

150 East Exchange Street

Akron, Ohio

ASK FOR
Colonial Motor Oil

[Medium] Grade

BORNE, SCRYMSEY COMPANY
NEW YORK BOSTON FALL RIVER PHILADELPHIA

For Motorcycle Lubrication

Expressly prepared to meet the conditions of motorcycle lubrication, which differ radically from automobile lubrication.

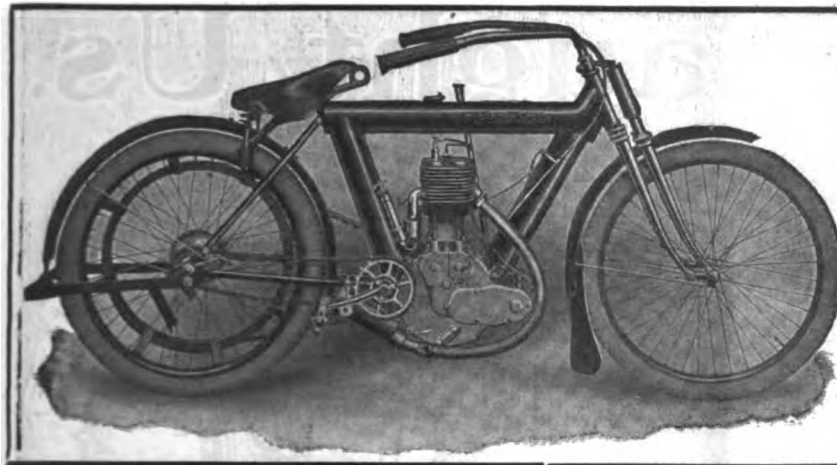
"SIMPLEX" MOTORCYCLE SPECIALTIES

We have a good proposition for good dealers

Write for Catalog now

ANGSTEN-KOCH CO. 380 W. Garfield Boulevard
CHICAGO

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.



PIERCE SINGLE CYLINDER Wins Another Victory

Following letter received from F. A. Baker & Co., New York agents for Pierce motorcycles.

June 24, 1912.

The Pierce Cycle Co., Buffalo, N. Y.

Gentlemen:

"We wish to advise you that one of our riders yesterday went through the 200-mile Endurance Run of the North Jersey Motorcycle Club.

The rider says: 'I made them all sit up and take notice, for my Single would pass even the 7 h. p. twins.' He completed the entire distance without a single mechanical adjustment."

Ask for catalog and agency proposition. Immediate Deliveries.

The Pierce Cycle Company, Buffalo, N. Y.

THE COAST LINE TO MACKINAC

CITY OF CLEVELAND III CITY OF DETROIT III

DETROIT, CLEVELAND, BUFFALO, NIAGARA FALLS

TOLEDO PORT HURON GODERICH ALPENA, ST. IGNACE

THE CHARMS OF OUR SUMMER SEAS

Spend your vacation on the Great Lakes, the most economical and enjoyable outing in America

WHERE YOU CAN GO

No matter to what point you want to go, use D. & C. Line Steamers operating to all important ports.

Daily service between Detroit and Buffalo, May 1st to November 1st. City of Detroit III and City of Cleveland III, the largest side wheel steamers in the world, on this division June 10th to September 10th. Daily service between Detroit and Cleveland April 15th to December 1st. During July and August two boats out of Detroit and Cleveland every Saturday and Sunday night.

Four trips weekly between Toledo, Detroit, Mackinac Island and way ports. Daily service between Toledo, Cleveland and Put-in-Bay.

Special Steamer Cleveland to Mackinac Island, two trips weekly, June 15th to September 10th stopping only at Detroit every trip and Goderich, Ont., every other trip.

Special Day Trips between Detroit and Cleveland, During July and August Tuesday, Wednesday, Thursday and Saturday out of Detroit; Monday, Wednesday, Thursday and Friday out of Cleveland.

RAILROAD TICKETS AVAILABLE:—Tickets reading via any rail line between Detroit and Buffalo and Detroit and Cleveland will be honored for transportation on D. & C. Line Steamers in either direction.

Send 2 cent stamp for illustrated Pamphlet and Great Lakes Map.

Address: L. G. Lewis, G. P. A., Detroit, Mich.

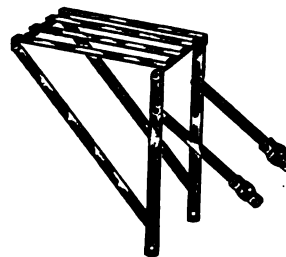
Philip H. McMillan, Pres. A. A. Schantz, Gen'l Mgr.

Detroit & Cleveland Navigation Company

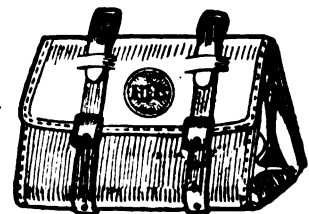


WISE RIDERS

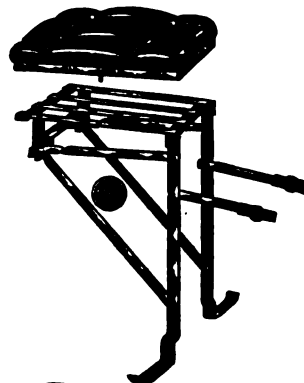
Observed Our Products on Hundreds of Machines at Columbus and were duly impressed



Do not miss an opportunity to see the



UP-TO-DATE ATLAS SPECIALTIES



ATLAS

COMBINATION SPRING TANDEM and LUGGAGE CARRIER

is the easiest riding attachment in the market.

Price complete with Cushion\$8.50

Remember we manufacture a full line of Leggings, Tool Rolls, Dust Guards, Tail Lamps, Luggage Carriers and many other useful Specialties.

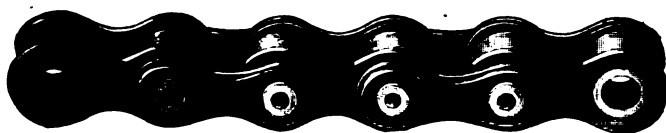


Write for Catalog. Our prices are right.

ATLAS SPECIALTY MFG. CO.

557-63 W. Jackson Blvd.

Chicago, Ill.



DUCKWORTH CHAIN & MFG. CO., Springfield, Mass.

"DUCKWORTH"

Service Chain has been adopted by all High Grade Makers—Why?—An investigation will show you

GAS ENERGY

An interesting, illustrated, practical and indispensable monthly magazine for those who make, use or sell gas or gasoline engines. 50c. per year. Sample copy, 10c.

GAS ENERGY COMPANY

26 Murray Street,

New York

FOR IMMEDIATE RESULTS

Place a Little Advertisement in

THE MART

Three Cents a Word for one insertion

Two Cents a Word per issue after that

M. M. MOTORCYCLES—1912 LINE

Single cylinder, 4 h. p., Battery, \$140.

Boech Magneto, \$180.

4½ Magneto, Free Engine, \$200.

Two cylinder, 8 h. p. Boech Magneto, \$225.

Immediate delivery.

Full line of accessories.

G. P. JENKINS

236 West 53rd Street, near Broadway

New York City

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

He Caught Us.

House Orders.

Each order is to be filled before six o'clock or shippers must work over time. We return the money, on any article sent back, at our expense, if not entirely satisfactory, shipments must therefore be correct.

If you want to please me - please our customers.

C. L. Waters, Mgr.

A manufacturer's salesman passing through our warehouse saw the blackboard on which we write the rules that govern the working of our shippers. He said—"If every Motorcyclist were to walk through here and see that board, a whole train would not hold enough supplies to fill their orders. Won't you let me take a photo of it to show the boys why your sales are increasing so fast." ABOVE IS THE BLACKBOARD.

Our big catalog of all-guaranteed supplies is free.—Write for it today.



MOTORCYCLE EQUIPMENT CO., Hammondsport, N. Y.

Motorcycle Valve Stems

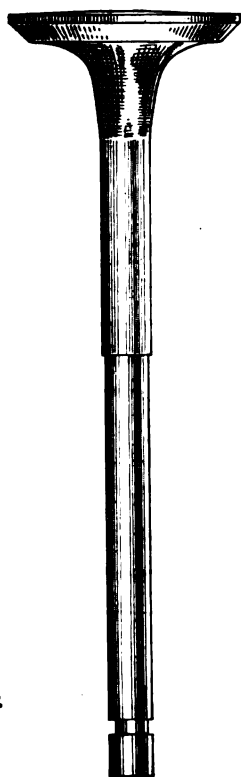
get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

If you are not using them, will you go into the matter with us?

The Electric Welding Products Co.
Cleveland :: :: Ohio



Gasoline Gauges For All Motorcycles

\$1.50 postpaid. Give depth of tank.

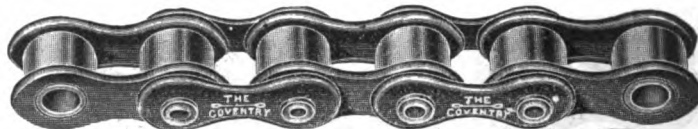
Circulars on request.

WEISS MFG. CO.

Torrington, Conn.

**Bicycles and Bicycle Sundries
Motorcycle Sundries and Supplies**

THE SIDNEY B. RCBY CO., Rochester, N. Y.



**"The Coventry"
Chains**

Imported

have proved their worth where Speed, Strength and Lightness are required, in many a hard fought race. They are as equally good for road work as for track.

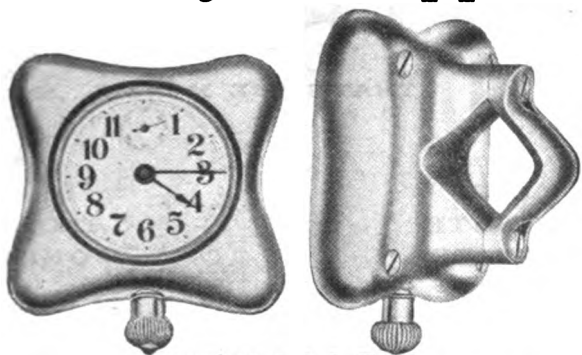
There's a reason for their supremacy. Ask us.
Catalogue cheerfully sent to you.

Sarco Engineering Co.

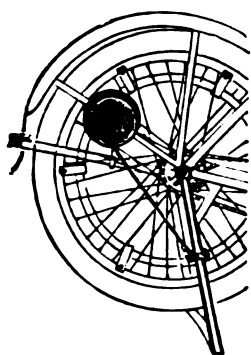
New York

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Motorcycle Supplies



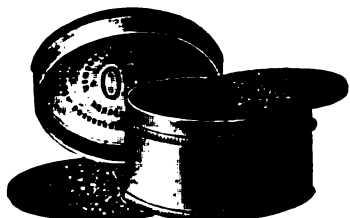
CLOVERLEAF M. C. CLOCK
movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$2.50.



MOTORCYCLE STAND LIFT
avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
List, Each \$4.50.



SPARK PLUG UMBRELLA
should be used on all exposed engines where water is likely to come in contact with plug and cause short circuit.
List, Each .30.



"O" PATCH ASSORTMENT
contains 10 Ready-to-Use Patches, which require no cement. Patches are 1 1/2 inch—just right for punctures. Contained in air tight brass box moisture and rust proof.
List, Each .60.



O. K. JUNIOR TIRE TAIL.
Handsome lithographed silver top metal can, with friction bottom, which can be opened when empty for refilling. Measures 1 1/2 by 5 inches. Best quality tail. Highest grade package for purpose ever put out.
List, Each .10.

THE BECKLEY-RALSTON CO.
MICHIGAN AVE. AND RANDOLPH ST., CHICAGO.



5 INCH MOTORCYCLE FLIER.
High Grade. Finely nickel plated.
List, Per Pair, .60.

WHOLESALE ONLY.
Order through your dealer. Positively no correspondence or orders handled in any other way. Dealers, ask for 500 page catalog of motor and cycle material. Most complete line ever shown.

EAST INDIAN MICA PLUG.
made of best East India mica. Lateral winding instead of mica washers. Best motorcycle plug made.
List, Each .70.

Mosler Spit Fire
Motorcycle Plugs

The Only Plugs in the World that actually Spit Fire while others spark only.

A. R. MOSLER & CO. 163 W. 29th St., New York.

TEN THOUSAND RIDERS
READ
THE MART
Our Classified Advertising
Page
THREE CENTS A WORD

Gee, But I'm Sorry

I DIDN'T HAVE A

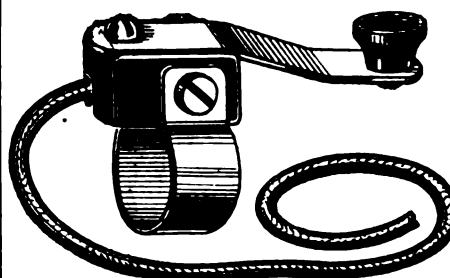
NATHAN KOVERAUL

motorcycle garment with me when I went on that F. A. M. tour. YOU BET I'll have one next time I ride. YES, I'm going to order one today.

Why don't you?

Write the Nathan people of 84A Reade St., New York City, and they will send you free samples and prices.

Simplex Magneto Cutouts



Simplex Magneto Cutouts, 50c. prepaid.

and other Genuine Simplex accessories are made for service, and increase the comfort and safety of all motorcycles.

Send for Catalog
Simplex Machine Works
45th St. & 6th Ave.
BROOKLYN, N. Y.

We also build the
Simplex Side-Car

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



THE BAXTER SIDE-CAR

**The Strongest, Lightest
Most Comfortable Side-Car
in the World**

Ten years of side-car manufacturing experience has qualified us to state authoritatively that the Baxter side-car is fit to cope with any and all road conditions in America.

Its chassis of seamless steel tubing, double truss frame construction and rigid mudguard give it enormous stability.

Yet so scientifically is the weight distributed that it is the lightest frame on the market. Then, too, the hub spindles, the most vulnerable point on a side-car, are turned from solid Bessemer steel.

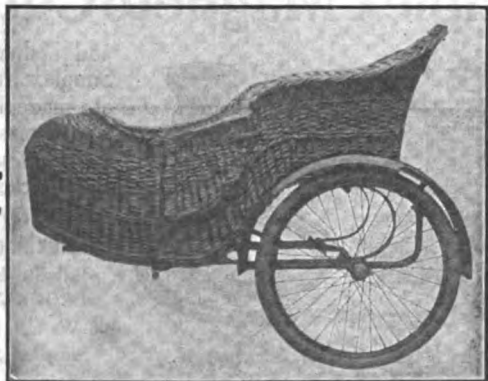
Comfort is assured by its tension spring absolutely absorbing all shocks, its deeply upholstered basket of India rattan and its popular English shape.

Note.—We make baskets to specifications. All parts quick-detachable and furnished separately if desired.

BAXTER SIDE-CAR CO.

119 Broadway

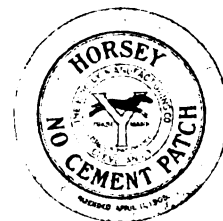
CAMBRIDGE, MASS.



HORSEY

THAT'S THE NAME

**ONE
MINUTE
REPAIR**



**USE
GASOLINE
ONLY**

**No Cement No Acid
INNER TUBE PATCH**

One trial of Horsey No-Cement Patches and you will consign Cement and Acid Repair methods to the scrap heap and be dollars ahead by doing it.

Large Kit, box contains 12 assorted (large and small) patches, **\$1.00**.

Vest Pocket Kit, box contains 8 assorted (small) patches, **50 cents**.

Manufactured exclusively by

The Horsey Manufacturing Co.

5606 Euclid Ave., Cleveland, Ohio

The Federation of American Motorcyclists

Governs and administers the sport of Motorcycle racing and other competitions in which motorcycles engage; it defends and protects the rights of motorcyclists and facilitates touring; it encourages the use of motorcycles and promotes the general interests of motorcycling.

For F. A. M. Booklet and all information write

E. M. ESTABROOK

Chairman Membership Committee F. A. M.

Bangor, Maine

The Breed Tandem Attachment

Very Light--Yet Remarkably Strong

THIS TANDEM SEAT IS DIFFERENT !

- 1st The Breed fits any machine.
- 2nd Attached in a twinkling because all connecting parts are adjustable to suit the varying angles of different machines.
- 3rd The shoulders on the Breed seat bars obviate the necessity of changing short axles for long ones.
- 4th Folder steps prevent breaking of front rests.

SOLD TO DEALERS ONLY

BREED MANUFACTURING CO.

Department M

BAY CITY, MICH.

If You Saw Them You Would Buy Them

There's a Whole Season's Mileage and More, in These

\$3.00 CASINGS

They are in Excellent Condition and Guaranteed

G and J, M and W and Goodrich

28 or 26 x 2½ Shoes, that will fit 2½ Rims if required

BAKER'S INFALLIBLE LINE includes everything a motorcyclist needs, at saving prices.



Price Complete,
\$3.00



MODEL No. 2

Model No. 1, \$7.50

BAKER'S INFALLIBLE EXHAUST WHISTLE

This signal is the simplest and most perfectly designed whistle on the market. Very easy to attach. Held securely by two bolts. Absolutely free from clogging by carbon. Gives an intense piercing sound. Made of brass, highly nickel-plated.

INFALLIBLE SPEEDOMETER

A perfectly adjusted and constructed instrument tested for accuracy. Guaranteed for satisfactory service. Steady registering hand. Made in three models: No. 1, registering speed only, price \$7.50; No. 2, measuring season's mileage and speed, \$10.00; No. 3, season and trip mileage and speed, \$12.50. Mention make of motorcycle when ordering. Rear attachments furnished unless otherwise specified.

No. 2, \$10.00

No. 3, \$12.50

INFALLIBLE HEAD- LIGHT

Throws a long and powerful light ahead and at the sides. It is specially adapted for motorcycle use. Very strongly and handsomely made. Has perfect projecting 5-in. mirror and 6-in. flare front. Furnished in fine nickel or highly polished brass. Price in Brass, \$4.00; Nickel, \$5.00. Brackets, per pair, 10c.



F. A. BAKER & CO., 10½ Warren Street, New York City

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.



The Neverout
TRADE MARK

**Gas Lighting
Outfit**

FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles implored us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

ROSE MANUFACTURING COMPANY

933 Arch Street, Philadelphia, U. S. A.



TESTIMONIAL !!
PERSONS QUALITY DOES IT



Model-R-Champion
Size, 13" x 12 1/4"

Extract from a letter from Stockton, Cal., dated June 12, 1912.

"I like your Champion Saddle and will always say a good word for same.

"The top is in perfect condition after five thousand miles' riding and I notice other saddles here are all out of shape, with less use than mine has received.

(Signed) "J. C. STUART."

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**J-D Visible
Cured
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DIAGNOSIS—Ignition Trouble

**PRESCRIPTION—One set J-D Visible
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We can cure your ignition troubles, too. The new principle embodied in the J-D VISIBLE GAP SPARK PLUG enables you to locate and cure ignition trouble at a single glance.

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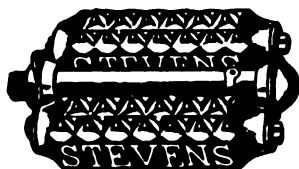
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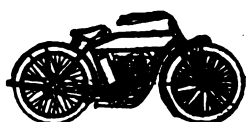
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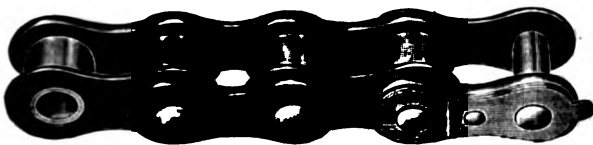
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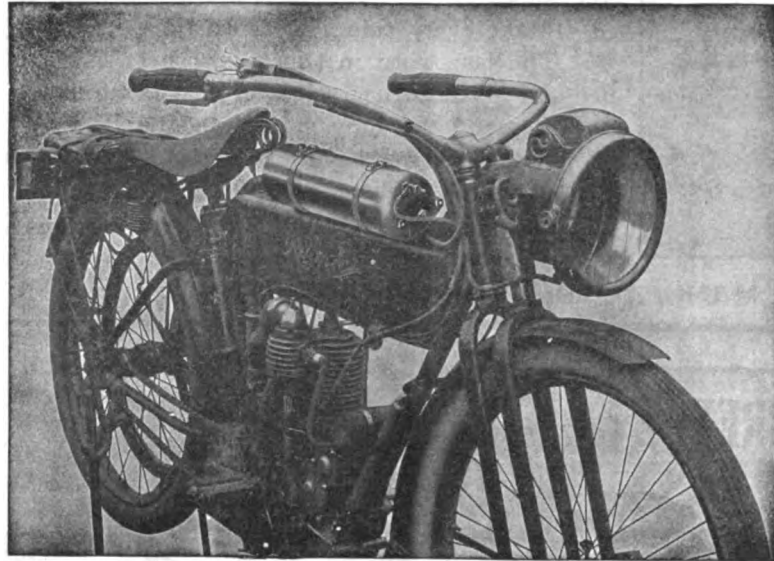
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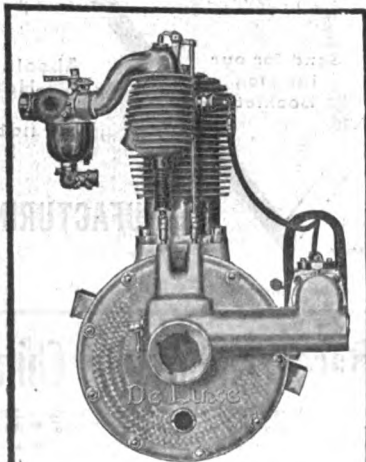


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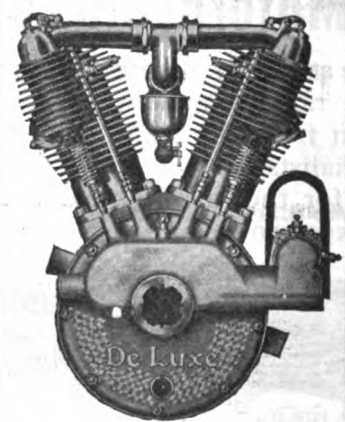
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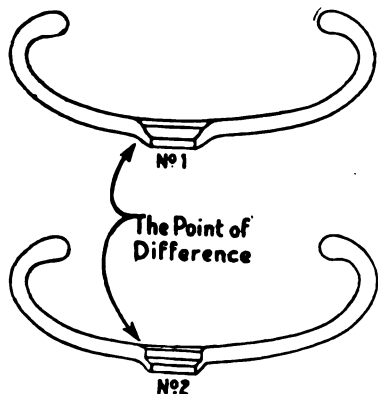
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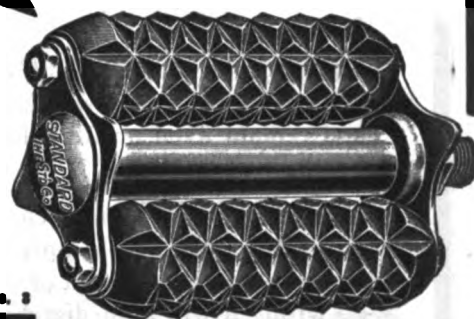
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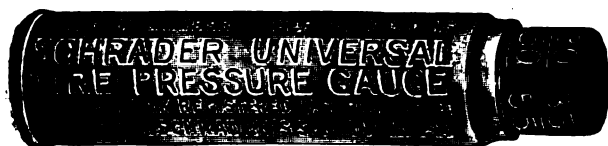
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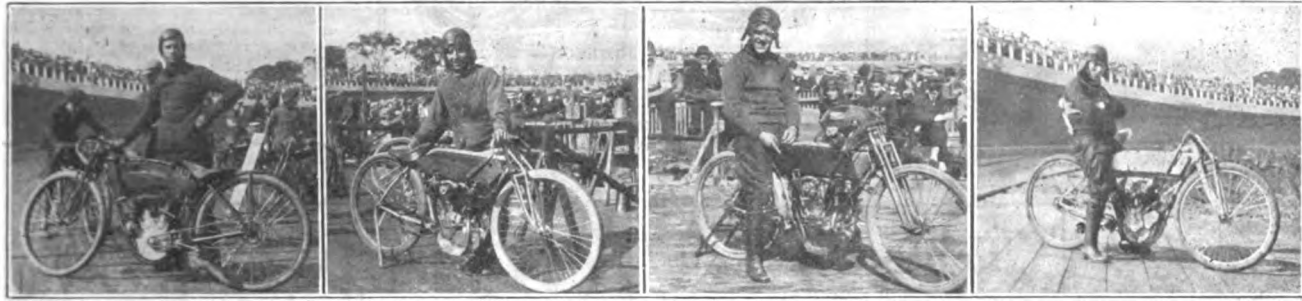
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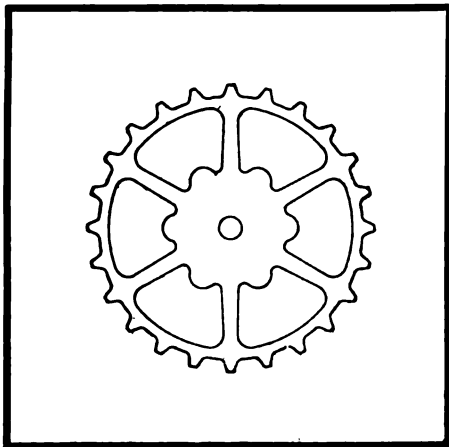
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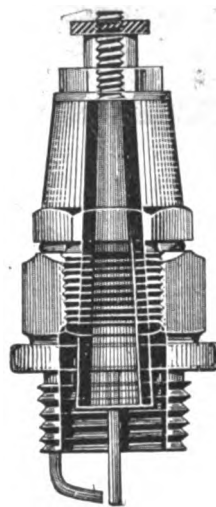
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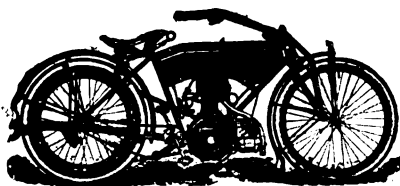
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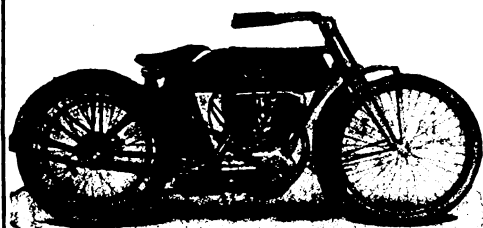


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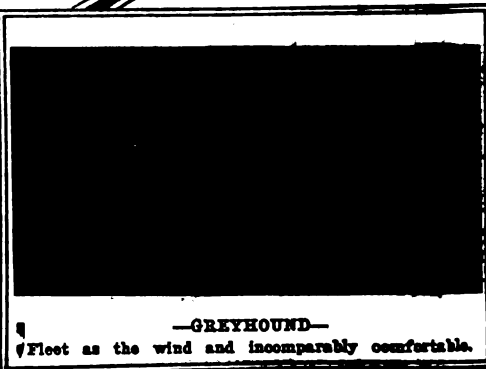
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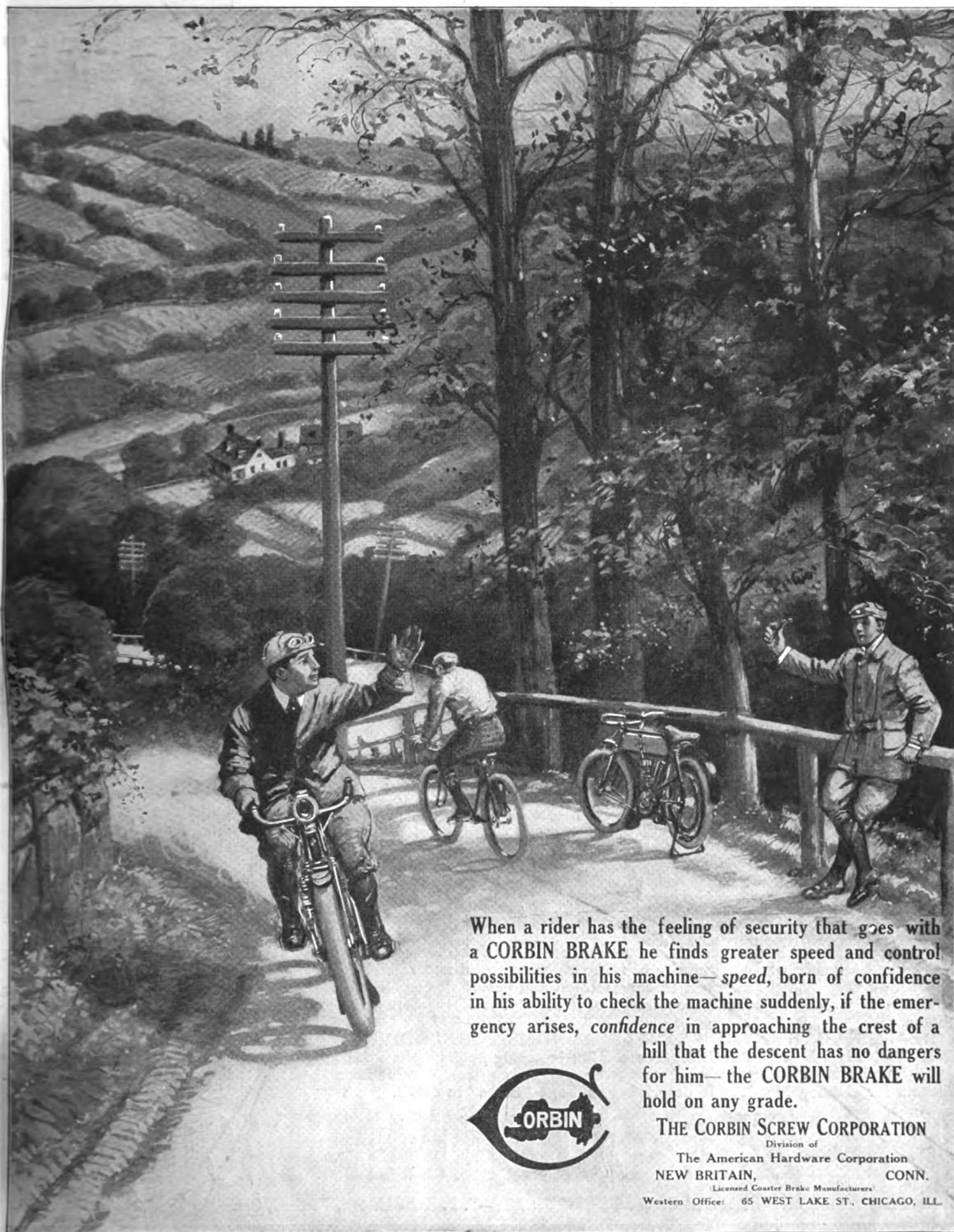
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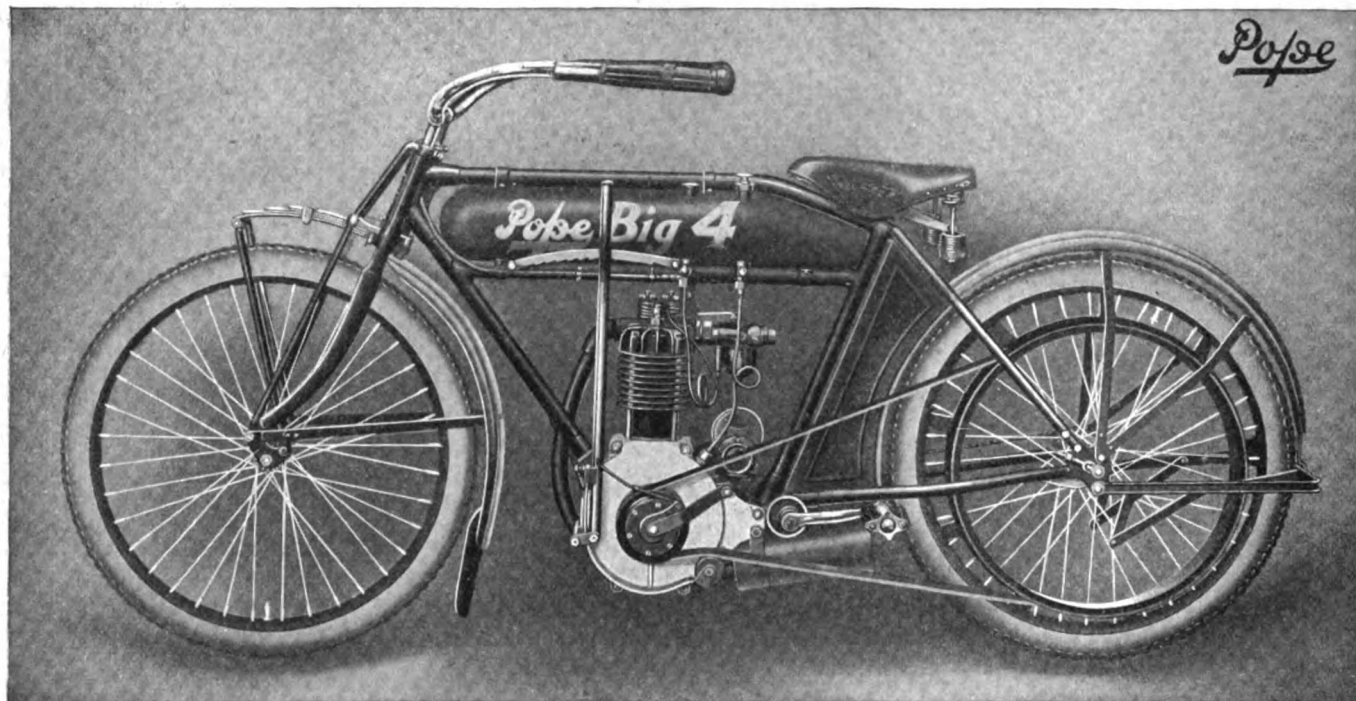
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Has many original features and all that is latest and best

POWERFUL SPEEDY RELIABLE



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Mechanically Operated Valves
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Imported Magneto.
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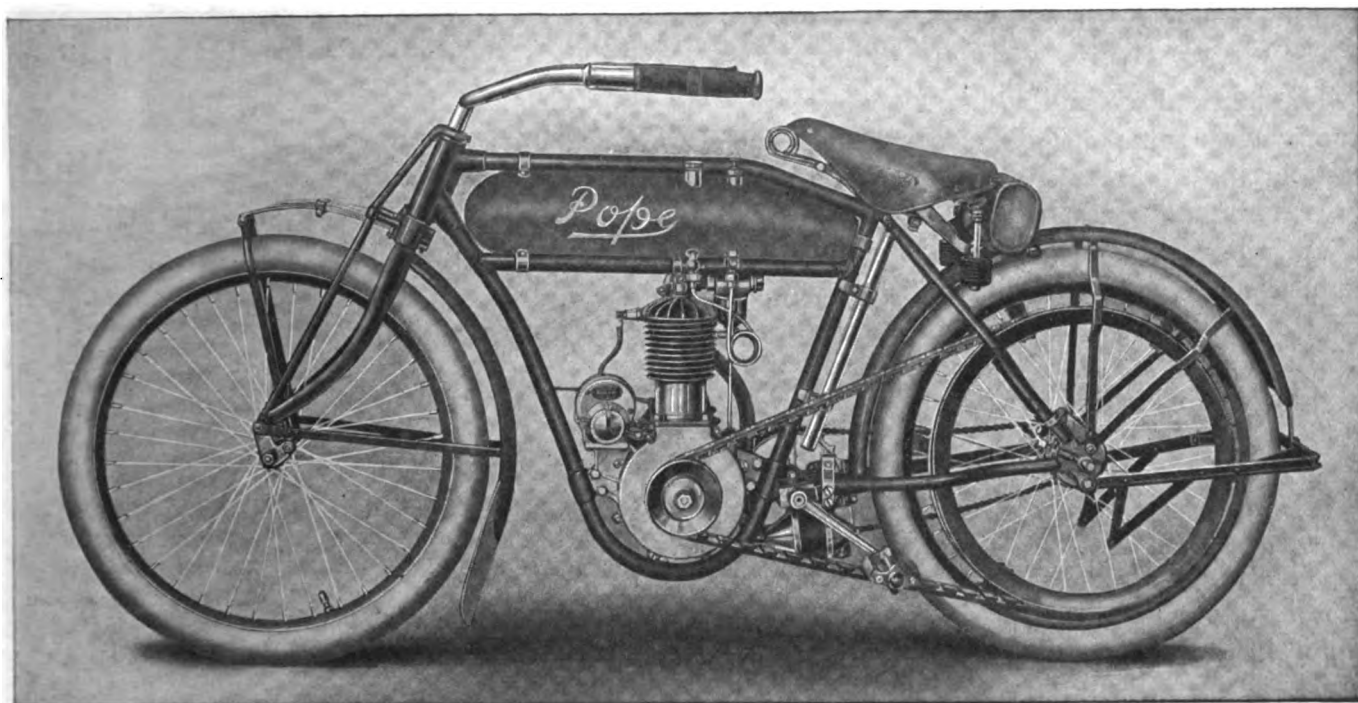
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Model H, Pope Motorcycle, With Imported Magneto—\$165

Model H is the leading high-grade, light-weight machine of moderate size and power—the one that has done most to popularize the sport of motorcycling.

It has made a great name for itself as a thoroughly reliable, road-worthy machine. It is recognized everywhere by riders and dealers as the standard of its class.

The tremendous success of this motorcycle has proved our original contention that there was a large and growing field for a light, moderate-powered, popular-priced motorcycle of the Pope type.

To keep pace with the popular demand, Model H will be manufactured in increasing quantities as originally planned.

DEALERS—Pope Motorcycles have made a wonderful selling record. Everywhere they have shown the way to large sales and quick profits. There are big opportunities for Pope Dealers in open territory. Write for terms.

Send for Catalog No. 70. It describes the Pope "Big 4" and Model H in detail.

The new Pope "Twin" will soon be ready! Watch for its announcement this Fall. It will round out a great selling line. Horsepowers and prices to suit all persons and purses.

PANY, Hartford, Conn., U.S.A.

.. Sacramento—Northern California and Nevada.

C. L. SMITH, Los Angeles—Southern California

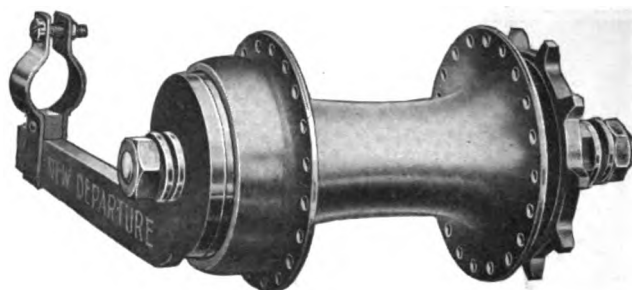
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NEW DEPARTURE

Motorcycle Specialties

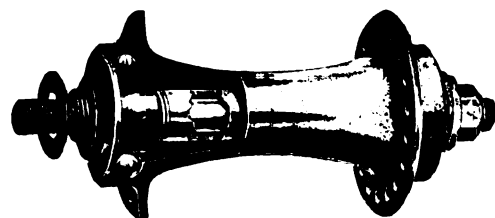
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



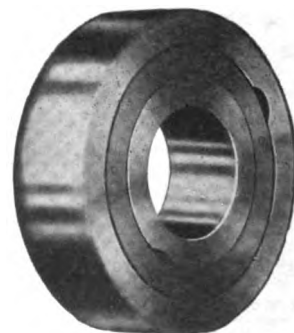
"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and gives maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen 1/4-inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



Write Today for Literature

THE NEW DEPARTURE MFG. CO., Bristol, Conn.

COASTER BRAKE LICENSORS

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per

day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4.....\$5.50	28 x 2 1/4.....\$6.50	28 x 3.....7.25
26 x 2 1/2.....6.00	28 x 2 1/2.....6.75	29 x 3.....7.50
	28 x 2 3/4.....7.00	

Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

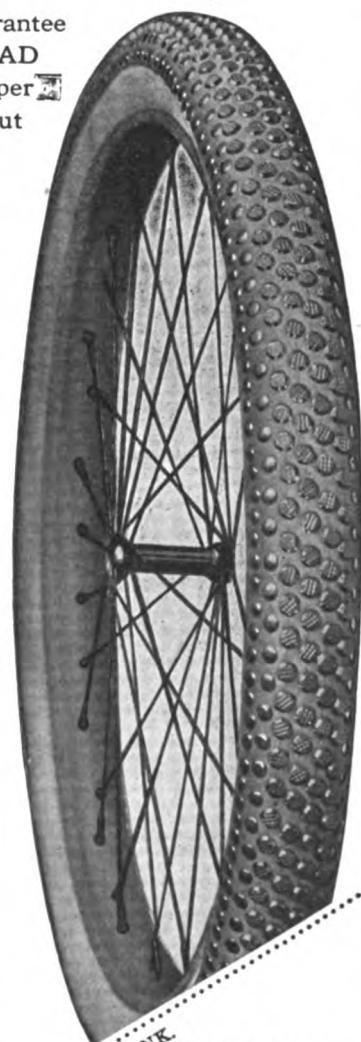
Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. BRICTSON, President
The Bricton Mfg. Co.
2582 Bricton Building
Brookings, South Dakota

O. A. Bricton,
President,
The Bricton Mfg. Co.,
2582 Bricton Bldg.,
Brookings, So. Dak.
Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

Name.....
City..... State.....
County.....

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



O. A. Bricton,
President,
The Bricton Mfg. Co.,
2582 Bricton Bldg.,
Brookings, So. Dak.

Enclosed please find.....

in the sum of \$.....for which

ship by ex. or fgt.....(quantity).....Bricton

Motorcycle Treads, size.....with the understanding if they are not perfectly satisfactory I may return them within 10 days from receipt of shipment and you will refund my money.

Signed.....



CONTINENTAL- ERIE Motorcycle Tires

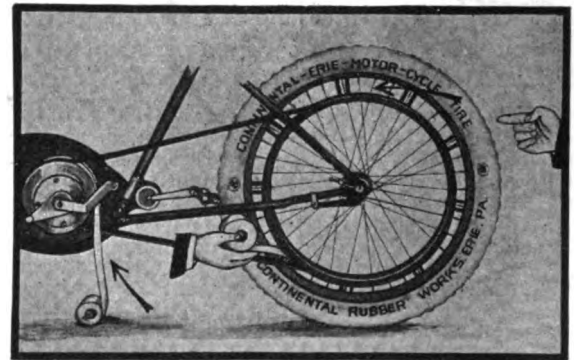
White Studded Tread

Are Built for Service

Continental-Erie Tires are made of the very best grade of Sea Island Fabric, Highest grade of Friction and have an especially Tough and Resilient Tread.

Continental-Erie Tires are made only by Tire Makers of long experience.

Specify Continental-Erie Motorcycle Tires when ordering your next machine.



TRADE Non-Slip-Lag MARK

No More Torn Belts

Doubles the life of the belt and adds
25% to the life of the machine

NON-SLAP-LAG is the new lining for pulleys. It absolutely prevents belts from tearing and slipping; increases their life and affords additional power. Non-Slip-Lag can be applied without removing Belt or Pulleys. No Screws or Metal Parts are required to hold Lag on Pulley. Non-Slip Lag is now being used exclusively by the Eclipse Machine Co., on the Eclipse Free Engine Pulley.

About Continental-Erie Goods
Ask Your Jobber—He Knows

DEPT. T

CONTINENTAL RUBBER WORKS, Erie, Pa.

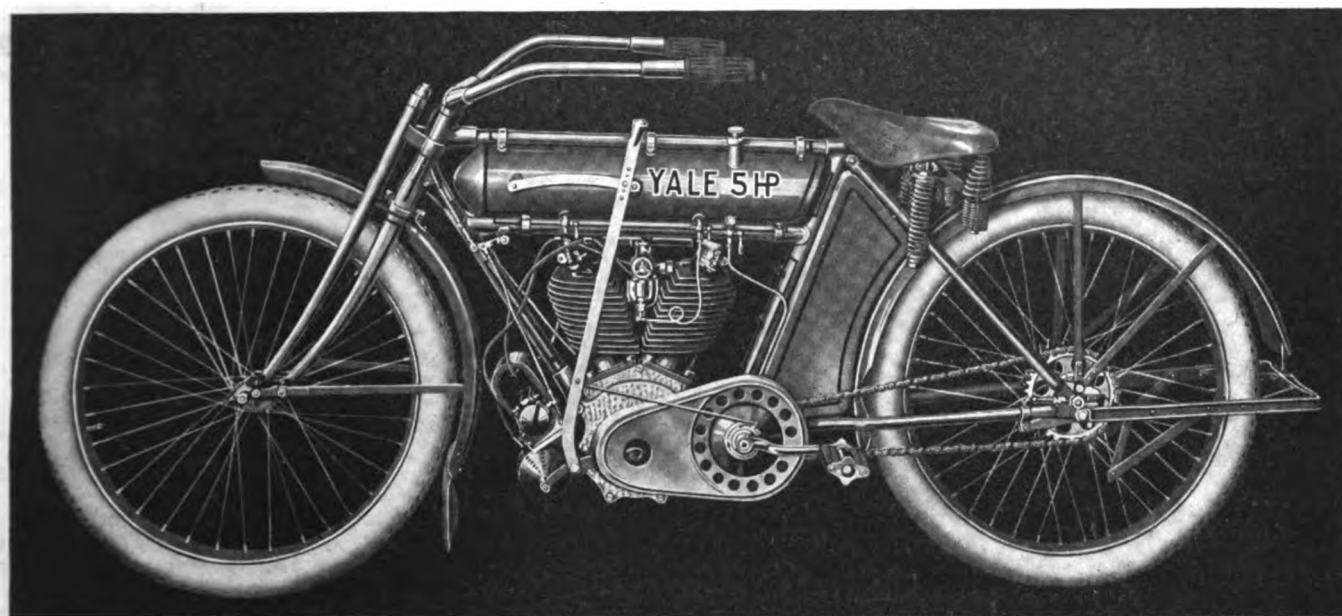
New York Branch, 35 Murray St.

Chicago Branch, 131 N. Canal St.

Cleveland Branch, 1551 Columbus Road, N. W.

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The Everlasting YALE



Model 27, **\$285.00**

Model 25, **\$260.00**

YALE RELIABILITY is a recognized fact, attested to by hundreds of dealers and thousands of riders throughout the country. The world's record for endurance established by the YALE July 9th, 10th and 11th, 1909, remains unbroken. The record for low upkeep cost of operation made the same year has never been equaled. YALE Motorcycles are shipped same day order is received.

INVESTIGATE THE YALE

Singles and Twins—Belt Drive. Twins—Chain Drive. Armored type Bosch Magneto, the celebrated Y-A Shock Absorber—original "jolt killer," 29 x 2 $\frac{3}{4}$ " studded tires—10% oversize, regular equipment. Immediate deliveries. Write to-day for literature.

Agents Wanted in Open Territory

THE CONSOLIDATED MANUFACTURING COMPANY
 1730 Fernwood Avenue Member M.M.A. Toledo, Ohio

F. C. CORNISH, Eastern Representative, 219 Clinton Ave., Newark N. J.

We also make Yale and Snell Bicycles, Hussey Handle Bars and Drop Forgings of every description.

Prest-O-Lite Motorcycle Gas Tank

The ONLY Practical Light for Motorcycles

The rider who stays close at home for fear he will not get back before dark, misses half the joy of motorcycling.

Night riding in safety is made both possible and pleasant by the use of a large enough lamp and a RELIABLE source of brilliant light.

The Prest-O-Lite Gas Tank is the ONLY lighting equipment that meets these needs.

A gas generator, besides being a troublesome nuisance, is not reliable. Small generator lamps are too feeble.

Prest-O-Lite floods the road far ahead with brilliant light—shows up the humps, ruts and puddles.

The flame neither flares up nor dies down—it is STEADY under all conditions. Turned on and off like a gas jet.

Exchange service wherever you may be, is provided by over 20,000 dealers (motorcycle and automobile). We will arrange prompt service for anyone, anywhere.

Price of Tank \$10

(Equipped with gauge.)



Dimensions: Length, 13¼ inches; diameter, 4 inches; weight, 8¾ pounds. 40 hours of light. Easily attached to any motorcycle.

Mr. Dealer:—*In this one ad alone there are plenty of reasons why you ought to be pushing the Prest-O-Lite Tank, for your customer's sake as well as your own.*

And if you want to retain your customer's trade on other things, don't get him into the habit of going elsewhere for Prest-O-Lite exchanged.

Prest-O-Lite Owners



Ernest B. Cowan, 960 Farnsworth Ave., Detroit, has his 4 H. P. Indian Motorcycle equipped with PREST-O-LITE. He says—"I find it is the only light on the market for satisfaction."

You Can Easily Afford It

Prest-O-Lite service costs no more—usually costs less—than the carbide a generator consumes.

The money you invest in the tank itself is not SPENT, because a genuine Prest-O-Lite Tank never gets to be second-hand, is always in demand, and is always a READY CASH ASSET.

In fact, no rider can afford to be without this combined CONVENIENCE, PLEASURE and INSURANCE. One accident due to poor light might cost you more than years of Prest-O-Lite service.

Don't Let Anyone Cheat You with an Imitation

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one ANYWHERE and ALWAYS. Imitations cannot.

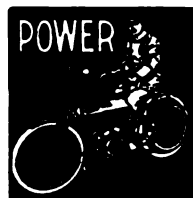
The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank, gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

The Prest-O-Lite Company 246 East South St. Indianapolis, Ind.

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

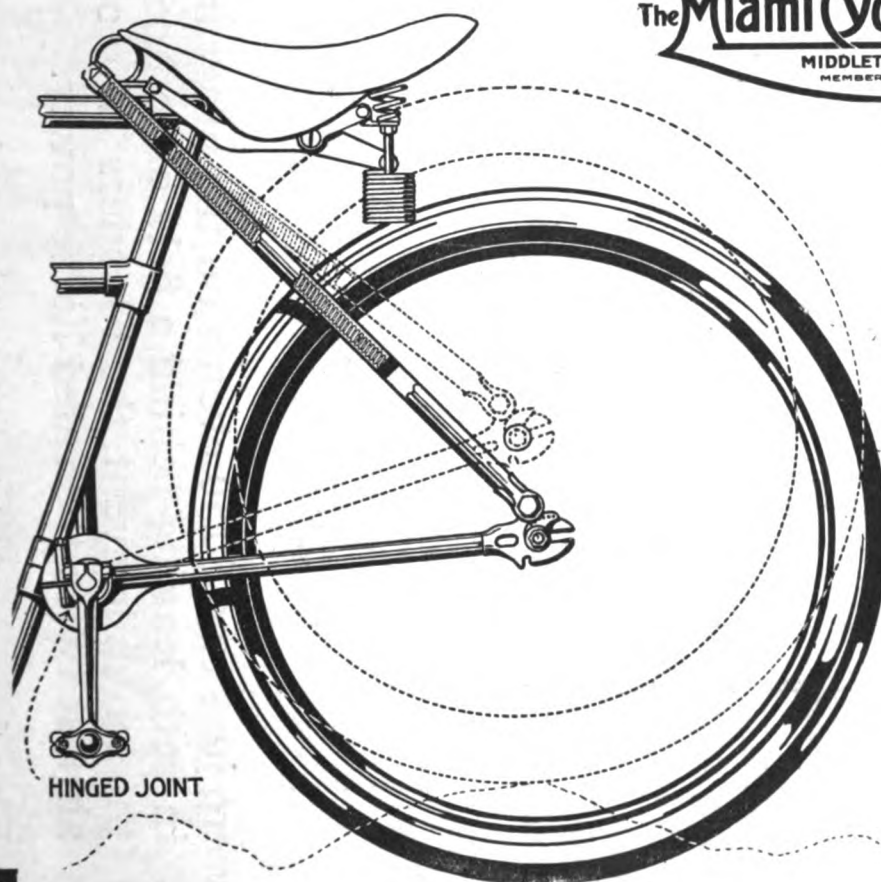


THE FLYING MERKEL

Why It Is the Most Comfortable Motorcycle

THE whole rear wheel construction of "The Flying Merkel," the only motorcycle with a Spring Frame and Spring Fork, is hinged at the pedal crank axle. The illustration shows how this permits the wheel to be raised in riding over bumps from 4 to 5 inches without changing the saddle position whatsoever. Note the long spiral springs encased in the rear stays which support the rider. This unique form of construction means the utmost in motorcycle comfort, which, together with powerful ball-bearing engine, remarkable economy and positive reliability, make "The Flying Merkel" riders the most enthusiastic and satisfied of the bunch.

The **Miami Cycle & Mfg. Co.**
MIDDLETOWN, OHIO
MEMBERS OF N.M.A.



California Distributors, The Appeal Mfg. & Jobbing Co., Los Angeles, Cal.

Oregon & Western Washington, West Coast Supply Co., Portland, Ore.

Idaho, Montana & Eastern Washington, Spokane, Cycle & Supply Co., Spokane, Wash.

Wyoming & Colorado, C. W. Brown, Denver, Colo.



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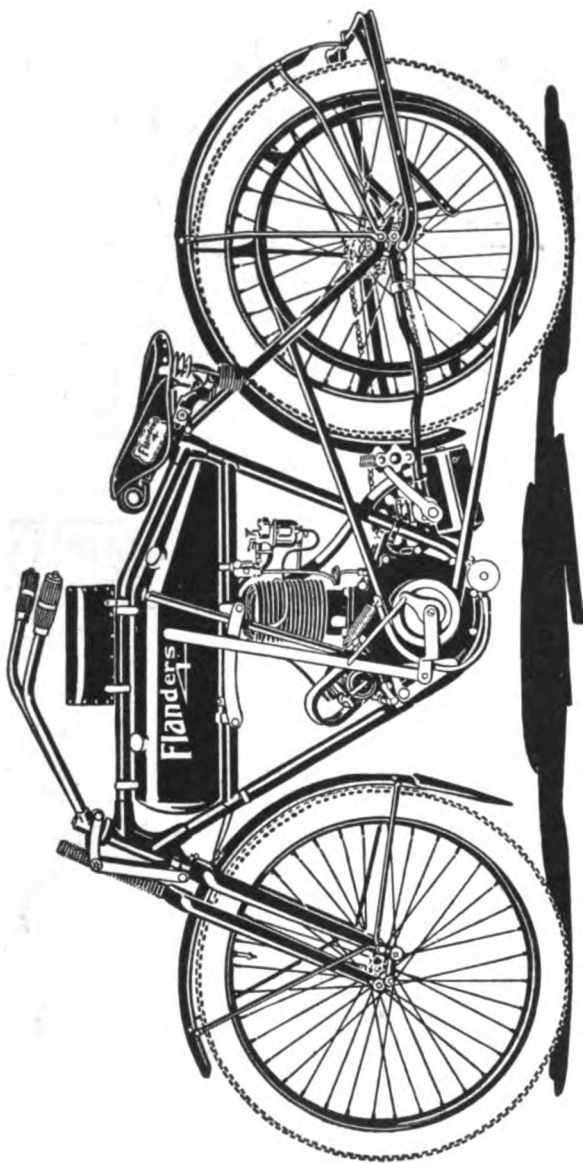


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16

The Flanders "4," at Jackson, Mich., on July 28, took first, second and third, in two of the four events, winning out against a large field of competitors.

MOTORCYCLE ILLUSTRATED



Speed, Power, Comfort, Reliability, Satisfaction, Thorough Construction, Easy to Handle, and Combining All Desirable Features—That's the Flanders "4"

A Machine That Wins Out Against All Others of Like Power and Against a Number of Almost Twice Its Power—that's the Flanders "4"—the Machine for You, Mr. Motorcyclist.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

There were just two 30.50 events on the program, and the Flanders "4" took one, two, three in both, leaving behind a field of competitors riding machines of other makes. In the ten mile event, the Flanders "4" took third, winning out over several twins of almost twice the rated horse power.

And the Flanders motorcycles were regular stock machines—the kind you get when you buy a Flanders "4." There is no necessity of "tuning up" a Flanders. The machines on the track are exactly like the one delivered to you if you buy a Flanders "4."

Flanders 4" MOTORCYCLES

\$175

At the Factory

While the Flanders "4" always gives an account of itself when entered in a race, it really is built especially for the road. And you can bank on a Flanders to give you the best possible service at all times and under every conceivable condition.

Before leaving the factory every Flanders "4" is put through a most severe test, insuring perfection in every detail. And when the machine gets on the road, we know that the service will greatly surpass even the expectations of the buyer.

The Flanders "4," whether for pleasure or commercial use, will always give the utmost service. It is reliability in itself, and if looking for a machine that will give absolute satisfaction at all times, the Flanders "4" is it.

At \$175 at the factory, the Flanders "4" is the best value on the motorcycle market. The machine is in every respect equal to others selling for \$50 more. But our facilities, our vast experience in building automobiles and motorcycles, make this low price for so high grade a machine possible.

A Postal Brings the Catalog

FLANDERS MANUFACTURING COMPANY

PONTIAC, MICHIGAN

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There it is —

my saddle—the saddle that has revealed to me the real value of a perfect saddle-service—the

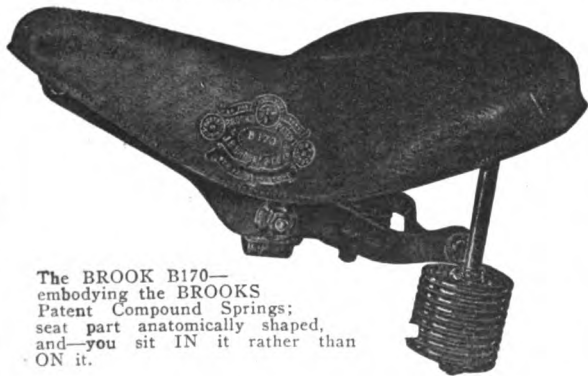
BROOKS—

the only saddle that can embody the original and only genuine compound spring.

And you must learn by actual experience the value of that feature—it cannot be over estimated, and—it means "the roughest road vibrationless!"

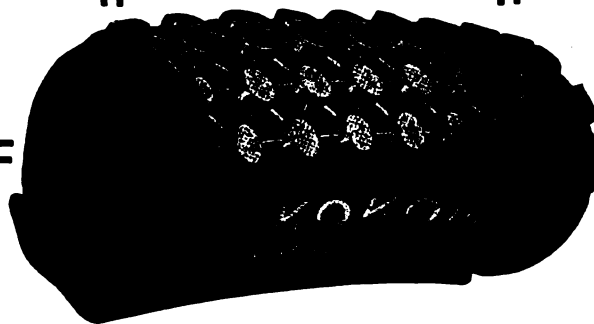
J. B. BROOKS & CO., LIMITED
75 [Criterion Wks., Birmingham, Eng.

Distributing Agents for U. S. A.—THE D. P. HARRIS
HARDWARE CO., 48 Warren St., New York.



The BROOK B170—
embodying the BROOKS
Patent Compound Springs;
seat part anatomically shaped,
and—you sit IN it rather than
ON it.

KOKOMO TIRES



KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, as proven by many tests is that Kokomo are

Low Cost
Durable
Efficient
Long Wearing } **TIRES**

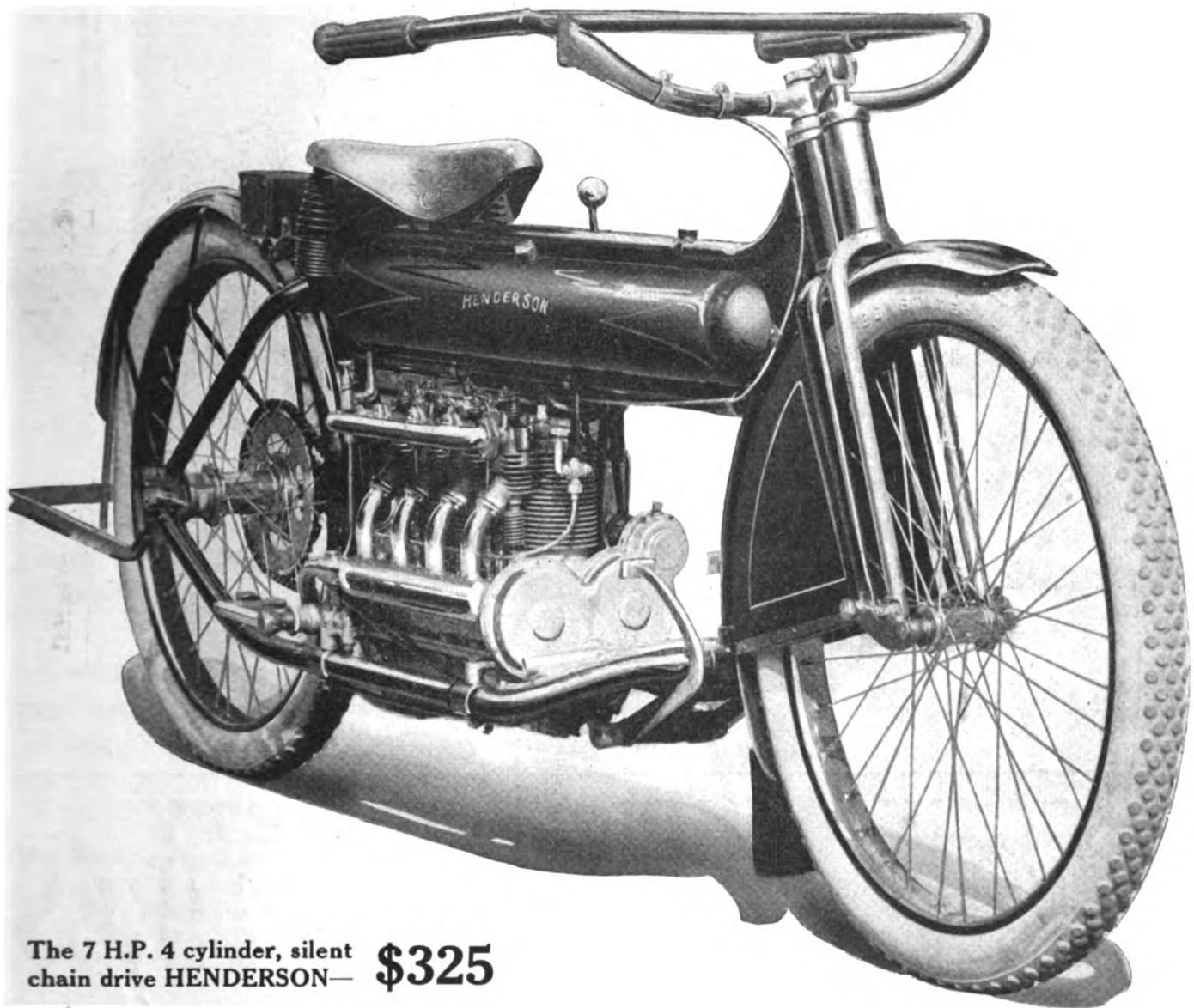
*Literature sent upon
request.*

KOKOMO
RUBBER COMPANY

KOKOMO, IND.

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EVERY DAY YOU SEE MORE HENDERSONS



The 7 H.P. 4 cylinder, silent
chain drive HENDERSON— **\$325**

The increase, from day to day, in the number of Henderson Motorcycles you see indicates the growing popularity of this high grade machine.

At this minute the factory is behind its orders; but no pushing or persuasion by buyers will induce us to rush production at the cost of quality.

This demand comes in the face of extraordinary activity on the part of the motorcycle manufacturers; and emphasizes more than ever the trend to powerful machines that provide comfort and speed without noise and vibration.

Send for catalog and the dealer's name.

HENDERSON MOTORCYCLE CO.

1158 Cass Avenue, Detroit, Mich.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



CONFIDENCE + SURETY

Many motorcyclists meet with traffic problems similar to the above every day, but not every rider is able to accept the issue with confidence. The wonderful, flexible Ball Bearing Motor of

THE FLYING MEREKA

never causes its rider any worry or gray hairs. It will instantly throttle down to slower than a walk and just as quickly pick up to express train speed. Being positively the **Most Flexible Motorcycle Engine** made it is the safest—at all times under absolute control of the operator.

Fully Explained in Catalog "B"



California Distributors: The Appeal Mfg. & Jobbing Co., Los Angeles.
Oregon & Western Washington: West Coast Supply Co., Portland, Ore.

The **Miami Cycle & Mfg. Co.**
MIDDLETOWN, OHIO
MEMBERS OF N.M.A.

Eastern Washington, Idaho & Montana: Spokane Cycle & Supply Co., Spokane, Wash.
Colorado & Wyoming: C. W. Brown, Denver, Col.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the Motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubes, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

OFFICES IN

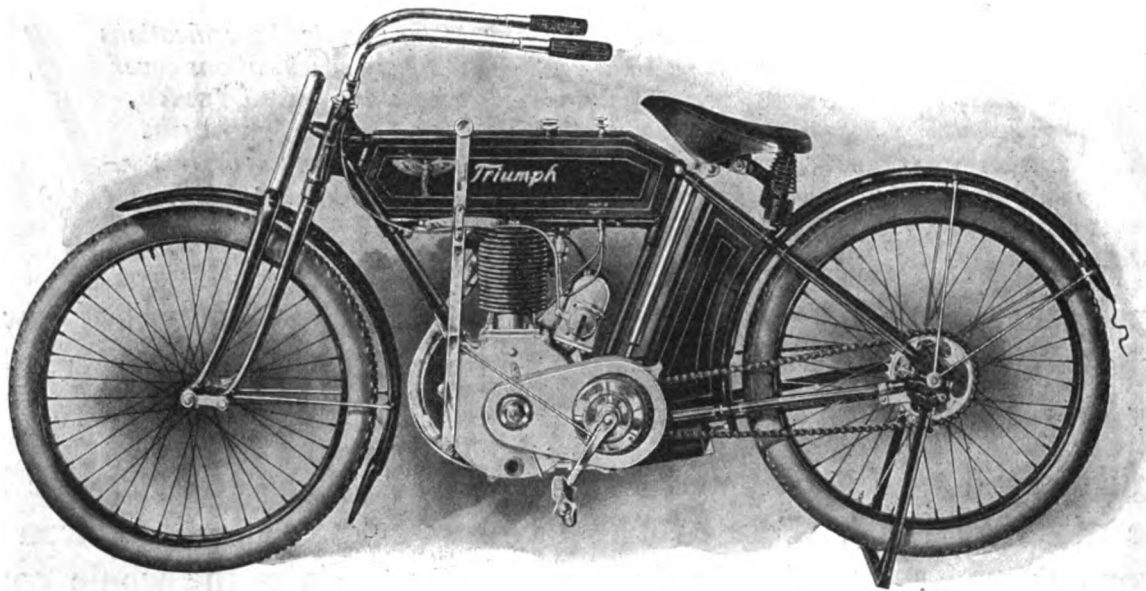
NEW YORK

CHICAGO

DETROIT

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1913 TRIUMPH



NOW

TRIUMPH MANUFACTURING COMPANY

51-55 East Woodbridge Street, Detroit, Mich.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

It Can Be Proved To You

The *extra strength* built into United States Motorcycle Tires thru our cooperative, four-factory method of manufacture will actually rid any motorcyclist of the annoyance and expense of unnecessary tire trouble.

United States Motorcycle Tires are *rugged* and *dependable*. Users have a right to expect more from them than from other tires because they combine every individual strong point of two brands of motorcycle tires, each of which was for years a recognized leader in the tire field. They are not only *four-factory-made*, but are *four-factory-tested* as well.

If your tire experience in the past hasn't been entirely satisfactory; if you feel that you haven't been getting service returns commensurate with your tire investments, we suggest that you try one or two United States Tires. They are sold by a majority of the substantial, year-in-and-year-out dealers throughout the country.

UNITED STATES TIRE COMPANY
NEW YORK

Dealers Everywhere

VOL. 7

MOTORCYCLE ILLUSTRATED

NO. 16

AUGUST 8, 1912

PATTERSON REAPPOINTS CHAIRMEN

Heads of Competition, Membership, Legal Action and Publicity Committees are Retained and Compensation is Recommended.

THAT President Patterson, in taking up the duties of his office as chief executive of the F. A. M., intends to live up to the reputation he has already established for rapid-fire activity in connection with the affairs of the national body is evident from the celerity with which he acted upon the appointments of committee chairmen. Having in mind the call issued by Retiring-President Hamilton for a meeting of the Federation Board of Directors at Detroit, during the convention of the Cycle Parts Industries, August 6-9, President Patterson made his recommendations several days ago, as follows:

Chairman of Competition Committee, Dr. J. P. Thornley.

Chairman of Membership Committee, E. M. Estabrook.

Chairman of National Legal Action Committee, J. Leo Sauer.

Chairman of Publicity Committee, F. I. Willis.

It will be noted that in each instance the chairman is re-appointed, President Patterson's policy evidently being to retain in harness the officials who are seasoned by past experience, for the record-breaking pull of the coming year. He also recommends that each chairman receive compensation.

The President's letter is in full as follows:

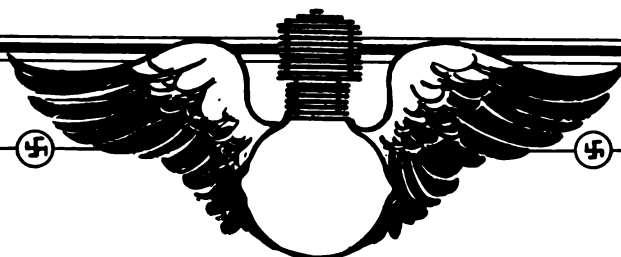
"In accordance with the orders of former President Hamilton, who issued a call for a Directors' meeting at Detroit, Mich., August 6-9, I wish to make the following suggestions in regard to the different appointments:

"In the first instance I wish to appoint Dr. J. P. Thornley, of New York, as the chairman of the Competition Committee; E. M. Estabrook, of Bangor, Me., as chairman of the Membership Committee; J. Leo Sauer, of New York, as chairman of the Legal Action Committee; F. I. Willis, of Indianapolis, as chairman of the Publicity Committee.

"I would also suggest that the chairmen of the different committees be allowed a suitable compensation for the work devolving upon the office.

"As to the other appointments I want to hear the suggestions of the balance of the Board before making further recommendations.

"In the matter of the office of the President I will ask that the Board of Directors apportion a suitable sum for a good secretary or stenographer, as I expect to do considerable writing during the present year to the different officers and members."



REVISED CONSTITUTION AND BY-LAWS

Important Changes by Which F. A. M. Officials Will Perfect State Organizations as Governmental Units and Pave the Way for Unprecedented Co-Operation in National Body

BELOW are given extracts from the revised F. A. M. constitution and by-laws, embracing the more important changes provided for in the amendments adopted at the Columbus convention. As will be noted, the most significant revisions have to do with the reorganization of the national body, with the States as governmental units. Copies of the constitution and by-laws, embodying the proposed changes have been forwarded to President Patterson and Secretary Gibson by Chairman J. Leo Sauer, of the National Committee on Legal Action, who introduced the amendments at Columbus. At the same time Chairman Sauer forwarded the following letter, referring to the revisions and the improvements at which they are aimed:

"In accordance with the amending resolutions introduced by the undersigned and unanimously adopted by the 1912 National Assembly of the Federation of American Motorcyclists, I am today forwarding to our secretary-treasurer a copy of a revised Constitution and By-laws.

"The Assembly adopted eight amending resolutions. Seven of these are very specific and under them the committee was authorized simply to phrase certain changes into the Constitution and By-laws. The eighth amendment, however, providing for a definition of the powers and duties of State Commissioners, permits the Revision Committee to exercise its own judgment, with comparatively few limitations.

"The committee has endeavored, however, not to take undue advantage of its opportunities. We have given this question very careful consideration; in fact it has had my attention for more than a year, during which time I have consulted with a number of State Commissioners and have also obtained some very valuable information from Mr. E. M. Estabrook, the chairman of our Membership Committee.

"You will find the duties and the privileges of State and local commissioners defined, but only in a general way, in Article VIII of the By-laws. In writing the seven sections which make up this article, I have followed the principle adopted by the makers of the Constitution of the United States, in the sense that the State governments are to exercise all powers that are not expressly delegated to the national organization under our Constitution and By-laws. Provision is made for the appointment of State Commissioners by the National President, but only in the event of the failure of the members of any State to nominate their own commissioner. Of course, as President, you will appoint the first set of State Commissioners, but thereafter each State will be privileged to name its own chief executive.

"When appointed by you State Commissioners will be expected to proceed at once to the organization of the territory under their respective jurisdiction. In doing so, they will follow out a general plan to be outlined by the chairman of the Membership Committee with your approval. The chairman of the Membership Committee is familiar with this feature of our work and

capable of doing full justice to the situation. Under the new Constitution, he will simply outline a general plan of organization so as to have uniformity in all the States, but upon this foundation State Commissioners will be expected to build their own organizations and to make them as efficient as they possibly can.

"For example, there is no reason why in due time, most of the State organizations cannot be made small replicas of the national body. It would not be well to go into all the details in our Constitution and By-laws, but it is simple to foresee that live commissioners will so effectively organize their States as to permit of annual conventions and quarterly or even monthly meetings; the election of a secretary-treasurer; the appointment of State committees, which will be the equivalent in all the States of the national committees and work in co-operation with the latter; State race meets, endurance runs, hill climbs, economy trials and tours and, in fact, all the attractions that are now extended to the riders of the national body.

"But these are all details which have no place in our Constitution and By-laws and which will require time to put into practice. But I believe that our plan of allowing a commissioner a wide latitude will be productive of rivalry among State commissioners, which will prove beneficial to the entire organization. In this connection, the time will no doubt come when our Board of Directors will offer prizes each year to the commissioner in whose State (1) there has been the largest percentage of increase in membership; (2) there has been brought about the most effective State organization; (3) in which has occurred the greatest accomplishment of value to the F. A. M. and its members, and, in fact, a number of other things which will no doubt suggest themselves in time.

"Referring to Section 7, you will note that the committee has clothed local commissioners with authority in proportion to their responsibilities. The new Constitution, however, will prevent even the slight-

est confusion of powers as between the national officials and State and local commissioners. The underlying principle is carried throughout the entire Constitution and By-laws, namely, that each locality within each State, and each State within the nation, shall exercise the full authority of the national body, except as expressly restrained by the provisions of the Constitution and By-laws, which specifically state the extent of the powers of the President, the Board of Directors and the National Committees. On the other hand, the change should make for that beneficent co-operation which it has heretofore been so difficult to secure.

"Under the new Constitution means are available for making the Federation of American Motorcyclists a model of administrative machinery, from the local commissioners up to the chief executive of the national body. Your committee is satisfied that the change will soon demonstrate its merit and that no one will ever have occasion to regret that it was authorized by the delegates who attended the Columbus meet."

The most important revisions in the Constitution are embraced in the two sections of Article 4 and in Section 6 of Article 5, as follows:

ARTICLE IV.

UNITS OF GOVERNMENT.

Section 1.—For convenience of government this Federation shall be divided into as many units as there are States. At the discretion of the Board of Directors, branches may be established in the American dependencies or in foreign countries.

Sec. 2.—The F. A. M. shall be represented in each State by a commissioner, who shall exercise in his State the full jurisdiction of the national organization, subject, however, to the Constitution and By-Laws, the resolutions of the National Assembly, and, as provided for in the Constitution and By-Laws, the acts of the President, Board of Directors and National Committees.

Sec. 6 of Article V.—There shall be five national committees, each consisting of a Chairman and the Board of Directors. All appointments of committee chairmen shall be made by the President, subject to the approval of the Board of Directors. Said appointments shall be for the remainder of the current Presidential term. National committee chairmen must be appointed within thirty days after the President has qualified, and if the President fails to appoint, the Board of Directors by a majority vote of the entire board, shall do so. The national committees shall be known respectively as Committees on Membership, Legal Action, Competition, Highway Improvement and Press, respectively.

Following are the most significant revisions in the By-laws, embraced in Section 10, of Article 7, and in Article 8, the latter dealing with State and local commissioners and their duties:

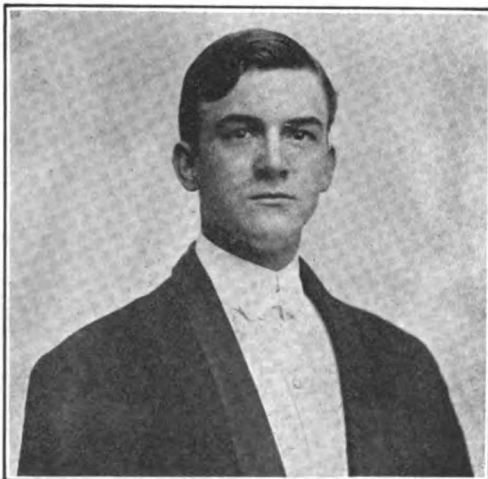
Sec. 10 of Article VII.—The F. A. M. shall maintain a touring bureau, in charge of a manager to be appointed and removable by the President, with the approval and concurrence of the Board of Directors.

ARTICLE VIII.

STATE AND LOCAL COMMISSIONERS.

Section 1.—Means for the organization of State government shall be devised by the Chairman of the National Membership Committee subject to the approval of the President. It shall be the duty of said Chairman to maintain, as far as possible, uniformity in the different State organizations, permitting to the members of each State, however, every possible opportunity for self-government not inconsistent with the Constitution and By-Laws and the objects and purposes of the National Organization.

Sec. 2.—The members of any organized State shall each year at some date prior to the opening of the National Assembly, nominate a State Commissioner, and the presentation, through the National Secretary, of his certificate of nomination to the National Assembly, shall be considered as the election of said



E. B. Ewell, of Richmond, State Commissioner for Virginia.

Commissioner, unless said nomination be over-ruled by a three-fourths vote of the Assembly. In default of the nomination of a Commissioner by the members of any State, a Commissioner shall be appointed by the President with the approval of the Board of Directors within thirty days after the adjournment of the National Assembly.

Sec. 3.—Immediately upon assuming office the Commissioner of any unorganized State shall proceed to organize his State in accordance with the plans proposed by the Chairman of the Membership Committee as aforesaid. State Commissioners shall, however, devise additional means for increasing the value of their State organizations, provided only that said means are not inconsistent with the general plan of organization applying to all States.

Sec. 4.—State Commissioners shall have full authority to appoint and remove county and local commissioners, and the latter shall co-operate with the State Commissioners in the same manner as the State Commissioners with the national body. Where there are no State Commissioners, or where the latter are negligent, appointments of county and local commissioners may be made by the President, upon recommendation by the Chairman of the Membership Committee.

Sec. 5.—The State Commissioners shall submit to the National Secretary reports on all matters affecting the interests of motorcycling and, in particular, the appointments of local commissioners, road and touring information, municipal, county and State legislation, the organization of new clubs, racing conditions, etc. Said reports shall be submitted at least quarterly, and oftener if necessary. Each State Commissioner shall also submit before July 1 of each year an annual report to the National Assembly.

Sec. 6.—State Commissioners shall co-operate with and carry out the instructions of the National President, the Board of Directors and the Chairmen of the National Committees. They shall, when necessary, transmit such instructions to the local commissioners.

Sec. 7.—Each local commissioner shall be the official representative of the F. A. M. in his district and shall be clothed with the full authority of the organization in his district, except as to powers which are delegated to others under this Constitution and By-Laws. A local commissioner shall assist the State Commissioner in increasing the membership of the organization; and developing ways and means for adding to the popularity of the sport in his locality; organizing local riders; advancing the work of the organization in large cities through the appointment of ward commissioners; assisting the State Commissioner in carrying out the policies of the State and the National Organization; rendering regular reports to the State Commissioner and in taking any further action to the end of strengthening the beneficial influence of the F. A. M. in his county, city, town or village.



GILMER MADE GAME FIGHT.

GEORGE GILMER, of Charlottesville, Va., the only Virginia rider to make the trip by motorcycle to the Columbus convention, appears in the accompanying photograph at the right. He was halted for repairs as the picture indicates and is being assisted by another tourist. Gilmer became known as "Old Virginia" to the boys in Columbus. On his way back to Charlottesville he ran into rain and the worst kind of muddy roads and was finally forced to abandon the trip and ship his machine home, much to his disgust. He had made a game fight to get through and was peeved when forced to quit.



Englewood Club riders, of Chicago, on a recent outing.

GIBSON'S LETTER TO A. C. U.

National Secretary Thanks British Organization for Courtesies Shown to American Tourists.

WITH reference to the proposition submitted at the Columbus convention by W. H. Wells, of London, for a reciprocal agreement between the British Auto Cycle Union and the F. A. M., Secretary Gibson of the Federation has forwarded the letter printed below to the headquarters of the English organization. Mr. Wells, as the official representative of the A. C. U., explained the plans of the English body for a more thorough understanding between the two organizations, and a formal reply to his proposition is now being framed by the F. A. M. Board of Directors to which the matter was referred at Columbus. Secretary Gibson's letter is as follows:

"This letter will recall to your mind the recent act of your association in sending to America a personal representative, namely, Mr. W. H. Wells, of London. Mr. Wells was delegated to bring to the Federation of American Motorcyclists, of which he is member No. 2843, in the convention assembled at Columbus, Ohio, July 17 to 21, the greetings of your English association.

"It was with great pleasure that, although Mr. Wells was not a properly accredited delegate to our convention, we accorded him the privilege of the floor because of the distinction under which he was there officially. Before the meeting Mr. Wells presented to me, personally, your letter dated July 5, which was an official communication in which was outlined the well-expressed desire of the Auto Cycle Union of Great Britain, to form with the American governing body, a mutual working agreement, with the end in view of having an amicable understanding for mutual benefits, and to obtain for the members of each association reciprocal courtesies while touring in the territory governed by each. I wish to state that I carefully read this letter to the delegates assembled at the convention.

"Action relating to this matter was put into the hands of our Board of Directors, and, as I am not one of that board, I officially have nothing more to do with it. You will doubtless, hear officially from our Board of Directors some time during the month, for our board will convene for a business session at Detroit, Mich., August 6 to 9 during the annual gathering of the Cycle Parts Industries Association.

"This letter is written to you because of the following facts: Mr. Wells, in an infor-

mal personal talk after he had orally presented other elaborations on your desires, made mention of the fact that the Auto Cycle Union had officially granted within the past year, to three hundred members of the F. A. M. touring abroad, the courtesies of your organization. This, surely, was a very kind act on the part of your organization and shows the true sporting instincts, personally and officially, and your desire to be helpful to the touring American brother

"It was the unanimous vote of the delegates assembled, that the American organization, through me as its secretary, express to you and through you to the other officials and members of the Auto Cycle Union of Great Britain, the heartfelt thanks of the American organization for these courtesies to our members and to those who are not united with us.

"The motorcycling situation in Europe is much different from that in America in one respect, that is: A certain long distance on our continent might easily be wholly in the United States, while one of equal or less length might cover a half dozen countries in Europe. Therefore, as regards customs helps when touring, we have very little to offer. Really, we are down to one borderland, that invisible line between the United States and Canada.

"As you are doubtless aware, we have established very pleasant relations with the Canadian motorcycle organization; we helped them to form, our officers wrote them many very pleasant, helpful letters, and we gave them many good pointers. They will escape some of the pitfalls that our organization got into during our early history; which happily we overcame without serious trouble. Our membership cards are mutually recognized in regard to competition, and we hope soon to



Chicago boys of Division B looking pleasant for the camera man at Columbus.

arrive at an even more helpful, beneficial, working agreement.

"To digress a little, I wish to state that your Mr. Wells used to live here in Westboro, Mass., having been connected with the Humber Bicycle Company and the Locomobile Auto Company. I only knew him slightly then, but when he recalled the matter to my attention, I remembered the facts of the case. I knew his brother, Harry, personally.

"I wish to express to you my personal greetings and hope that the correspondence occasioned by the matter at hand between us will be continued."

TRADE CAPTAINS ARE BUSY IN DETROIT

Two Hundred Boosters From All Sections of Country Open Cycle Parts Convention —List of Those Who Are Enjoying Fine Program

DETROIT, Mich., Aug. 6.—With nearly two hundred trade folk and visitors in attendance and every part of the country represented, the sixth annual convention of the Cycle Trade Industries promises to uphold in brilliant fashion the notable record of similar previous occasions. The Old Guard, under the adroit leadership of General Surre, enthusiastically reinforced by a goodly host of "never-been-there-before" folks, hold easy control of Fort Popularity which is shifted this year from the breeze-swept shore to automobile-famed Detroit.

The Official Headquarters.

The Hotel Cadillac is the official headquarters and a big majority is holding forth there, with others registered at the Ponchartrain and the Tuller. Within six hours of the arrival of the early comers this morning, 168 visitors had registered at the official headquarters and received, in addition to their official perquisites, a handsome be-ribboned cane furnished by the Kokomo Rubber Company.

Jolly Party from the West.

A jolly party, including Messrs. Surre, Schack, Henry, Johnson and Fry, and some fourteen or fifteen others, came west by night boat from Buffalo. Many of the Eastern crowd hailing from New York State, Eastern Pennsylvania and New England, traveled to the convention city over the New York Central and the Wolverine. Others arrived in such numbers as to justify the prediction that by Wednesday night there would be more people registered than at any previous convention, not even excepting the record-breaking affair in Atlantic City last year.

Boat Trip to Lake St. Clair.

The first event on the program was a sailing party to Lake St. Clair on the steamer *Sappho*, which had been chartered for the special use of the party. About 140, including nearly two score of the gentle sex, were the guests of the managing duet, Messrs. Surre and Dave Smith. There was dancing and light refreshment and a happy-go-lucky time

for all. The boat started under a threatening sky and while the leaden tinge to the atmosphere was never reflected in the faces of any of those aboard, no one seemed to object to the strenuous efforts of Old Sol to dissipate the haze, which the old fellow succeeded in doing by four o'clock.

A Big Theatre Party.

The weather conditions for the return trip were ideal and it was a joyous and well-satisfied crowd which was disembarked at the dock ready to do ample justice to one of the Cadillac's famous dinners. Tonight 150 members and guests of the allied associations occupied choice seats at the Temple Theatre to witness a first-class vaudeville performance.

Enthusiasm Records Broken.

Opinion is divided as to whether Detroit is as well adapted to the requirements of the situation as is Atlantic City, but at this meeting it is the consensus of opinion that the crowd's the thing. Here there is a crowd that could enjoy itself in the midst of Sahara, assuming, of course, that there was at least one oasis of moisture in the vicinity.

Speakers at Joint Meeting.

Announcement was made a day or two ago of the names of the speakers at the joint meeting of the cycle trades, as follows: F. I. Willis, of the Hearsey Willis Company, Indianapolis, "The Jobbers"; A. B. Coffman, Consolidated Manufacturing Company, "The Motorcycle"; Clarence E. Whitney, The Whitney Manufacturing Company, Hartford, Conn., "The Parts Makers"; John W. Henry, Vim Cycle and Hardware Company, Buffalo, "The Bicycle"; G. H. Hamilton, Federal Rubber Manufacturing Company, "Federation of American Motorcyclists."

Arrivals at Headquarters.

Those registered at the headquarters today were: Dave Smith, C. E. Moorehouse, W. J. Surre and wife, Maxine and Noah Van Cleef, M. L. Rosenberg, Max M. Sladkin, J. W. Grady, W. A. Johnson, M. R. Brown, G. W. Nock, T. Rick and wife, J. J. Harris and wife,

J. W. Henrick, H. O. Wait, Mrs. Robt. Henry, Miss Henry, Miss Alice M. Henry, Miss O'Keefe, Howard French, wife and son, W. G. Schack, F. J. Radloff and wife, Clinton Lovell, G. F. Jackson, wife and daughter, W. S. Surple, H. A. Williams, G. H. Westing, W. H. Grover, F. B. Parks, E. H. Strickland and wife, E. N. Hawthorne, E. S. Hawthorne, J. E. Poorman, Jr., J. Louis Rastatter, E. R. Pickard, D. W. Page, M. J. Horton, John Ide, S. B. Dusenberre, Harry G. Jacobs, J. Leo Sauer and wife, W. F. Sayle, Phil. H. Dorn, D. L. Spraker, F. W. Grubb and wife, W. S. Tullis, Louis Schwab, H. C. Bush, Keyser Fry and wife, C. J. McCurry, George H. Greys and wife, J. J. Smith and wife, R. B. Abbott, A. D. Meiselbach, Daniel F. Printz, J. C. Ferguson, Chas. E. Weaver, Harry Svensgard, W. F. Bartlett and wife, E. C. Huntington, Wm. Holland, Wm. F. Emerson, Chas. H. Persons and wife and son, F. M. Germane, A. N. Goodfellow, Stanley Wilson, J. W. Brandt, H. G. Davidson, J. W. Luck, A. Wallerstein, R. F. Kelsey, Harry C. Queen, F. W. Fee and wife, A. H. Harrop, J. C. Manternach, A. Eugene Bolles, C. J. Smith, H. L. Smith, H. E. Smith and wife, Al. Ray, R. W. Dick, W. C. Roby and wife, S. C. Hurley and wife, T. C. Larter, M. M. Stein, J. W. Jones and wife, A. Kinlock, J. P. Lamb, R. M. Barweiss (known as Budweiser), J. W. Spray, M. R. Davies, R. F. Barnes, T. J. Sullivan, G. W. Sherman and wife, Roger Sherman, R. M. Brownson and wife, R. M. Gingland, R. P. Hanson and wife, Fred C. Fromm, J. B. Trossel and wife, Geo. W. Breed, W. W. Totman, Guernesey Van Riper, A. J. Fisk, F. I. Wilis and wife, Miss Fannie Slocum, R. H. Winship, O. W. Mott, wife and son, Miss Ballard, Duke Trempi, F. Hawes, D. P. Harris, A. Edwin Batzell, E. C. Bowman, Geo. H. Kaufman, F. G. Bremer, I. N. Wilson, H. E. Krause, Wm. Smallwood, M. E. Mason and wife, A. B. Coffman and wife, F. G. Finkendandt, S. A. Waddle, H. H. Woods, Merle Sidener, John Neuberger, S. G. Lewis, wife and daughter, W. J. Wandersee, W. E. Diehl, A. J. Musselman and wife, G. W. Shroyer, L. G. Sigourney, E. W. Scott, P. H. Dover, L. J. Hood, E. R. Dumcolton.

BREEZY JOTTINGS FROM THE CONVENTION

GEORGE SHERMAN told a **MOTORCYCLE ILLUSTRATED** representative that the Triumph Manufacturing Company would soon place on the market a three-wheel delivery van of entirely new design.

NOT to be outdone, even by Dave Smith, in adding jollity to the occasion, were the ladies, chief among them the Misses Henry, Mrs. A. B. Coffman, Mrs. A. H. Strickland and Mrs. Surre.

A. J. MUSSELMAN was happy over the fact that yesterday in Detroit on a new golf course he had made eighteen holes in seventy-eight. He missed his lunch today to endeavor to do even better than that. Surre had time for only a plate of ice cream for luncheon.

ABOARD the *Sappho*, on the trip to Lake St. Clair, Dave Smith demonstrated to the satisfaction of all that he had gained another year on Father Time. At the rate the Down East cranberry grower is becoming younger year by year his friends confidently expect to see him trudging to primary school some day.

THE Corbin trio, headed by the indefatigable Harrop, provided the New Britain concern with the excellent representation it invariably has at all trade gatherings.

ONE had merely to whisper Excelsior to J. W. Grady to produce a volume of encomiums for the Chicago machine.

JACK BRANDT, of the Troxel Company, exhibited as of yore the happy faculty of making business dovetail to a nicety with fun.

W. G. SCHACK was seen anxiously scanning the horizon for Joe Merkel, for whom he had in reserve, he said, more than one strike to spare.

EX-SHERIFF HENRY had no occasion to make any arrests. His sister met so many good fellows that she was completely at a loss to make a selection.

J. C. FERGUSON, of the Eclipse Machine Company, was easily tempted to prove that 100,000 1913 machines were not at all beyond the range of possibility.

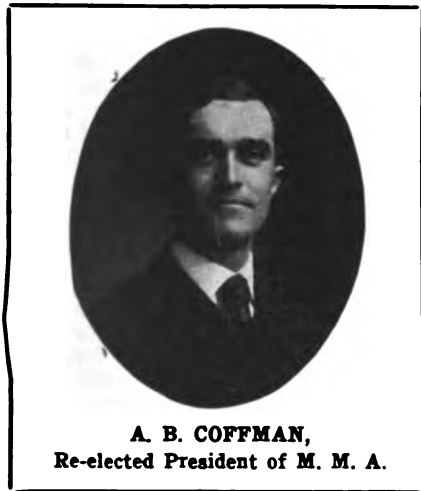
SECOND DAY BREAKS THE RECORD

Arrivals at Detroit Tuesday Night and Wednesday Morning Set New Attendance Mark—A. B. Coffman Re-elected President of M. M. A.

DETROIT, Wednesday, August 7.—Last night's and this morning's arrivals brought the total above that of any previous convention. The East was as well represented as at Atlantic City. A number of the motorcycle manufacturers were late, but in time to insure a representative attendance at today's meeting of the M. M. A., at which, in addition to the re-election of A. B. Coffman to the presidency, the principal feature was the discussion of the Chicago show situation. It developed that the motorcycle manufacturers would have to exhibit either in the Coliseum basement or in another building, as there is not space enough available in the Coliseum gallery.

Some Well-Known Figures.

Among the handsomest, as well as the most useful, souvenirs were those distributed by A. B. Coffman, the live one behind



A. B. COFFMAN,
Re-elected President of M. M. A.

the Yale. President Beysler, of the Reading-Standard Company, is present for the first time at a cycle trades convention. Remppis, of course, is also here. Sales Manager Arthur Davidson is at this writing the sole representative here of the Milwaukee company, but then Art can, when the occasion requires, do the work of two average men. Geo. M. Hendee is absent for the first time

in many years, and F. J. Weschler is his capable proxy.

More Entertainment Features.

Nearly threescore ladies attended this afternoon's reception. To-night a bowling match will feature the program. Seven or eight teams, representing, respectively, the motorcycle and bicycle manufacturers, the parts makers, the jobbers, salesmen, the press and so forth, will smash the lumber in frantic endeavors to take away those silver cups.

Still They Come.

Those to register Wednesday noon were: J. E. Talty, J. D. Hurley, Paul R. Acton, M. C. Stokes, W. H. Jennings, H. H. Calboth and G. H. Hamilton. Mr. I. N. Wilson was very much pleased with his first appearance at the cycle trades convention. A. B. Coffman, of the Consolidated Manufacturing Company, and Mrs. Coffman, along with Mr. Cornish, Eastern representative for the Yale, rode from Toledo to the convention in an automobile.

Busy Morning Session.

At this morning's session of the Motorcycle Manufacturers' Association two hours were taken up in the reading of the annual reports of officers and committees. Among the latter, those of the Dealers' Information and Publicity Bureaus showed that the results of this work had been most satisfactory. The F. A. M. Touring Committee and the Committee on Freight Rates reported that a hearing has been promised for the fall by the Interstate Commerce Commission. A. B. Coffman (Yale) presided, with Mr. Hardin (Pope) as secretary. Others present were Messrs. Jacoby (Merkel), Weschler (Indian), Schack (Emblem), Stanton (Flanders), Turner (Minneapolis), Johnson and Colburn (Pierce), Schickel (Schickel), Deysler and Remppis (R-S), Arthur Davidson (Harley-Davidson), J. D. Hurley (Thor), Ignatz Schwinn (Excelsior), W. T. Marsh (M. M.), W. T. Henderson (Henderson), Brownson and Sherman (Triumph).

FREDERICK WHITFIELD.

IT is with deep regret that the announcement is being received in trade circles of the death of Frederick Whitfield, secretary of the Excelsior Motor, Manufacturing & Supply Company. Mr. Whitfield died on



Friday, August 2, after having been seriously ill only a week. He had suffered for some time from stomach trouble, but the turn which necessitated a hurried operation was unexpected. Mr. Whitfield's ailment was diagnosed as cancer of the stomach.

Despite the fact that he had been in the motorcycle field only a comparatively short time, Mr. Whitfield had endeared himself to a host of friends. He was looked upon as a business man of great energy and was a keen student of men and conditions. He was a lawyer with a large practice in Chicago when he was called upon to take charge temporarily of the financial side of the Excelsior company's affairs during its reorganization by Ignatz Schwinn. Mr. Whitfield became so deeply interested in the work and the possibilities of the motorcycle field that he accepted the position of secretary with the new Excelsior company and became a potent factor in its advancement.

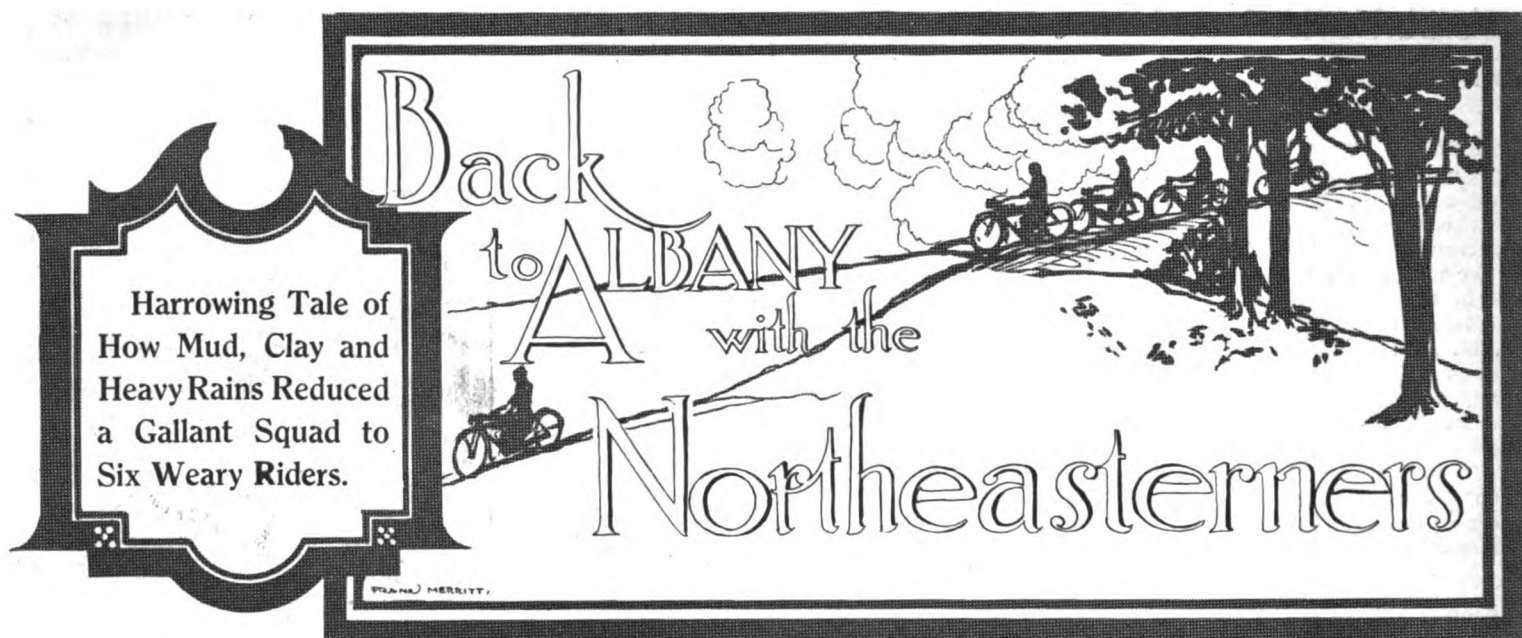
SEEKS TOURING COMPANION.

C. E. PARKER, of Dunbar, Pa., has laid plans for a trip to the Pacific coast, to start about September 1, and is anxious to get into communication with another rider who intends to make the cross country jaunt. Parker will ride a Tourist Trophy Indian 7, and he suggests that if he can locate a companion who also mounts an Indian machine, the problem of carrying spare parts and repair kits will be simplified. Parker may be addressed in care of the H. C. Frick Coke Company, Dunbar.

CIRCLEVILLE, OHIO, now has two motorcycle policemen



Miller Bros.' Attractive Pierce Agency in Washington, D. C.



FACING road conditions which would have dampened the enthusiasm of any but the most ardent motorcyclists, the riders composing the Northeastern F. A. M. touring division pulled out of Columbus on Sunday morning, July 21, for the return trip to Albany, and their experiences will be discussed for many a day. The outward trip, difficult as it was for the Northeastern squad, was an entertaining little social jaunt compared with the run homeward over rain-flooded roads, covered with mud and clay. Few endurance contests in this country have put the riders to a more severe test, and that the six enthusiasts who finally arrived in Albany earned their F. A. M. touring medals goes without saying.

On Saturday afternoon, after the final business session of the convention, the riders began to leave for home, some singly and others pairing up. Fully half the boys had enough of the Buckeye State clay on the trip into Columbus, and these riders shipped their machines home. The supply of empty crates ran short and some of the riders had to have special crates made. About fifty riders of the Northeastern and Northwestern divisions left Columbus Sunday morning, bound for Cleveland and Toledo, respectively.

Heavy rains had left the ordinarily poor roads in very bad condition, and a storm which broke just after the boys had started drenched the riders and made riding extremely disagreeable. The roads were very rutty and the rain had filled the ruts and flooded the roads to such an extent that progress was slow and precarious.

Rizika Has First Spill.

Abe Rizika, of Utica, N. Y., on a Monarch, went down in one of the deep holes which was hidden by the water, but escaped with bent pedals and a few bruises. Worthington was the first town reached; then the route led to Delaware, 25 miles from Columbus. Here a number of the riders decided to stop over another day until the roads had a chance to dry out.

W. Ronald, riding a Thor 5, skidded as an auto was passing and his front wheel was smashed, the tire was cut in two, his lamp

was broken and the handlebars and pedals were bent. The rider escaped injury. A farmer's rig was pressed into service and the wrecked machine was carried to the nearest railroad station and shipped to Cleveland. Here repairs were made and the rider joined the tourists at this point.

Abe Rizika and C. A. Roth, the Monarch riders, had plenty of belt trouble. Between them they made nine stops because of broken belts. As the belts were then too short to be of any use, Prosper Jenny, of Utica, on a Harley-Davidson twin, towed them back into Delaware, from which point they shipped their machines to Utica. Jenny decided that a parlor car seat was to be preferred to one on a skidding motorcycle and he also shipped his machine home to Utica.

A Genuine Endurance Run.

From Delaware to Marion the going was very bad and the riders were strung out all over the road in an endeavor to prevent falls. A dinner stop was made at Marion and here the Toledo division left the Eastern boys. About 35 riders were then left in the Eastern division and they set out to reach Cleveland before nightfall. From Marion to Bucyrus the roads became worse and many skids and falls taxed the riders' endurance.

C. T. Robbins, of Cleveland, on his Indian 7, crashed into a pile of crushed stone, breaking his front fork and twisting the wheel and handlebars. With the assistance of some of the other riders the wheel was pounded into shape, the broken fork springs were removed and the rider rode with rigid forks into the next town, where repairs were made. Howard Smith, on a 1910 Flying Merkel 6, with L. Murdock as passenger, had considerable tire trouble due to pinched tubes. Seven punctures in three miles kept him busy. F. Woodworth, of Youngstown, Pa., riding a Thor 5, broke his front fork springs when he hit a rock, but after tying up the forks with wire he rode into Cleveland. Then he shipped his machine home.

After leaving Bucyrus the going became so utterly bad it was practically impossible

to keep the machines on the road. Deep clay, mud and water began to conquer machines and riders, and one by one they were forced to quit. Farmers' rigs were hired by some of the less determined tourists and the machines were taken to the nearest railroad station and shipped to Cleveland.

At a fork in the road the remaining riders became separated, as no sign posts were visible. Both roads were in awful condition and each rider picked his own route. One squad led by Earl Ellsworth and W. Hetherington, Jr., became mired in the clay and mud three miles from Belleview. It was necessary for three men to handle each machine, and it took three hours to proceed as many miles. Darkness overtook the tired riders before a town could be reached, and as it was impossible to proceed any further the machines were left standing in the mud while the riders sought accommodation in nearby farmhouses.

Only Six Riders Survive.

After the riders had become discouraged at not being able to find a place to eat and sleep one farmer was approached who offered to put up the riders for the night, provided they would rough it. Only six out of the original 35 riders who left Columbus survived the grueling run to this point. They were John Kienzle, Indian 7, of Lorain, Ohio; Geo. Erving, Harley-Davidson 4, of Elyria, Ohio; Howard Smith, with L. Murdock as passenger, Merkel 6, of Albany, N. Y.; Earl Ellsworth, Indian 7, of Rochester, N. Y.; Chas. Springborn, Merkel 7, of Buffalo, N. Y., and Wm. Hetherington, Jr., Indian 7, of Brooklyn, N. Y.

With the united efforts of all the riders each machine was carried into the farmer's barn, and then, utterly exhausted, the boys took a brief rest while the farmer's wife prepared a supper. Sleeping accommodations could be provided for only four men, two others slept on a couch and the tallest man slept on the floor, as he needed the most room.

A second division, led by A. H. Gingras and five other riders of Holyoke, Mass., became mired just on the outskirts of Florence, Ohio. The machines were stored in a

nearby barn and the riders repaired to a country grocery store. The storekeeper was routed out of bed and the riders nearly bought out his stock. Canned goods, cheese, crackers and "pop" refreshed the riders and then a suburban train was boarded for Burlington Heights. Here sleeping accommodations were obtained at the Lakewood Hotel and the tired riders turned in immediately. Early the next morning they rode back to Florence and tuned up their "steeds" for the day. Each division started about the same time over equally bad roads, and shortly before noon the parties met at Elyria, 40 miles from Cleveland. Here an hour's stop was made for repairs and fill tanks and give the other riders an opportunity to regain their positions.

By Boat to Buffalo.

From Elyria to Cleveland excellent time was made and the riders repaired in a body to the nearest restaurant for refreshments. W. Hetherington, Howard Smith and L. Murdock were held up by a Cleveland policeman who demanded to be shown license tags. He was persuaded to let the riders off when it was explained that they were only riding through to New York. Howard Smith and three others decided to continue the ride into Cleveland via the poor roads, while the nineteen other riders of the combined divisions who had reached Cleveland agreed to take the night boat for Buffalo.

It was a hungry lot of tourists that boarded the boat. Some of them had arrived in Cleveland a few minutes prior to the boat's leaving and they had no opportunity to get supper. Geo. W. Bell, W. R. Morrison and P. M. Moulden returned to Cleveland via Akron. They had a hard trip. Mud, clay and water almost swamped them, and a minister in his buggy gave timely assistance in dragging them from the mire at one point. F. Blankshine, on an Emblem 7, ran into a steam roller near Norwalk. He was proceeding slowly at the time and neither rider nor machine suffered injury.

The following riders arrived in Cleveland in time to sail on the C. & B. steamer: A. H. Gingras, Holyoke, Mass., Indian 7; C. W. Burke, Schenectady, N. Y., Merkel 6; Earl C. Ellsworth, Rochester, N. Y., Indian 7; P. P. Parsons, Cortlandt, N. Y., Excelsior 7; "Whipple," the motorcycle man, Chicago, Ill., Flanders 4 (shipped machine from Columbus to Cleveland); Dayton Roth, Utica, N. Y., Monarch 5 (shipped machine Columbus to Utica); Abe Rizika, Utica, N. Y., Monarch 5 (shipped machine Columbus to Utica); P. J. Jenny, Utica, N. Y., H-D 7 (shipped machine Columbus to Syracuse); W. T. Sherman, Moravia, N. Y., Indian T. T.; Wm. Hetherington, Jr., Brooklyn, N. Y., Indian 7; Geo. W. Bell, Washington, D. C., Thor 4; W. R. Morrison, Washington, D. C., Yale 7; P. M. Moulden, Washington, D. C., Thor 4; F. Blankshine, Cortlandt, N. Y., Emblem 7; E. R. Collier, Cortlandt, N. Y., Excelsior 6; Chas. Springborn, Buffalo, N. Y., Merkel 6; S. M. Wheeler, Hubbardston, Mass., Thor 4.

Side Trip to Niagara Falls.

Bananas at 10 cents apiece and doughnuts at a nickel each were all the riders could get for supper. C. W. Burke forgot the number of his stateroom and, being too tired to look up the purser, he slept on the deck all night. The riders gathered in the reading room of

the steamer on the trip out, where each tourist related his experiences. Up to 12 o'clock only five of the boys had told their stories and the purser called the meeting off, sending the noisy (as he called them) riders to bed.

Upon leaving the boat, much to each rider's surprise, he received only a quart of gasoline in place of the full tanks which had been emptied before going on board. All the riders rode to the Neale, Clark & Neale Company's store, where the machines were left while Niagara Falls was visited by the riders in a body. At 3 o'clock a start was made for Rochester, and the riders arrived without accidents at 6 p. m. The roads were in splendid condition. The keys of the clubhouse were turned over to the visiting riders and a very pleasant evening was spent.

Early the next day two of the members who had been delegated by the president of the club piloted the riders through the city streets, pointing out the places of interest. Ontario Beach was visited, also the large reservoir, of which Rochester is justly proud.

A. H. Gingras picked up a large jagged piece of iron in his rear shoe, Earl Ellsworth received two punctures, and Wm. Hetherington, Jr., lost the generator part of his lamp while riding through the city streets. Accordingly Rochester was called the "hard luck city." A start was made for Syracuse at 2 p. m. A. H. Gingras had three blow-outs and lost two hours in repairing them. The roads were excellent the entire distance.

C. W. Burke, of Schenectady, Merkel 6, broke down just outside the city limits and had to ship home. S. M. Wheeler, of Hubbardston, Mass., riding a Thor 4, was struck by an auto near Syracuse and his machine was badly damaged. He had one of his toes broken and had to give up the plan to reach

home on his machine. After his injury had been dressed he rode home on the train.

Off on the Last Leg.

Early Thursday morning the remaining few riders prepared to cover the last lap of the 1,600-mile journey. Over excellent roads as far as Fonda they made fast time. Here some rough roads were encountered, but they gave the boys little trouble. A dinner stop was made at Fonda and after lunch the boys, all anxious to "check in," hit up a lively pace. Amsterdam Hill caused some trouble, after which the riders opened up for the few remaining miles to Albany. A. H. Gingras, of Holyoke, while coasting down a long grade, failed to see some fresh oil which had been poured on the road and took a spill, covering himself and his machine with the slimy mess. A kerosene bath removed most of the oil and he then proceeded with the squad.

At 5:30 p. m. the riders checked in at the clubhouse of the Albany M. C. and finished the 1,600 mile "tour," which really was a double endurance run, say the survivors.

The following men checked on schedule time: A. H. Gingras, Howard Smith and L. Murdock, S. Whittaker, C. A. Greene and Wm. Hetherington, Jr.

Out of the original 29 riders that left Albany on July 13 only six had arrived home on time. Nine had dropped out of the tour due to breakdowns; ten shipped their machines back home, and five left Columbus to visit the factories of their respective machines before returning to Albany. Howard Smith, who rode the Merkel 6 with L. Murdock as passenger, gave a splendid exhibition of the practical value of the motor two-wheeler as a passenger vehicle. He rode the entire distance with his passenger, and he had the distinction of being the only tandem rider of the Northeastern division to complete the journey to Columbus and return.



A Sunday touring squad in front of the headquarters of the Moreland Cycle Co., 413 North 48th avenue, Chicago.

ESLER WANTS A PARTNER.

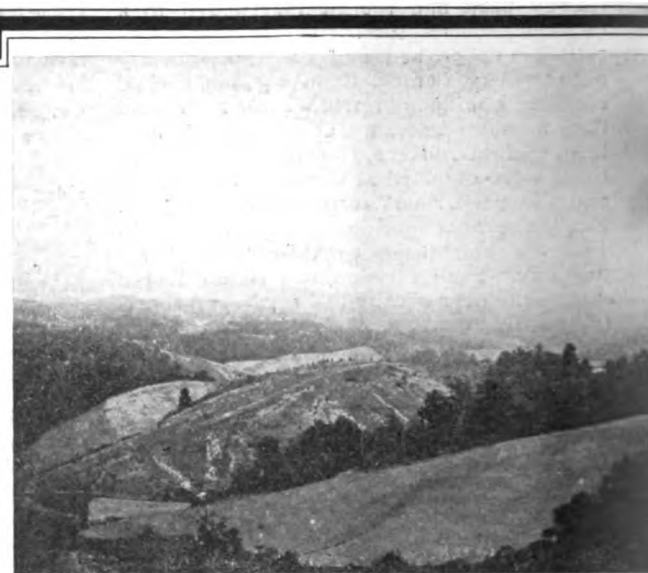
JOE ESLER, of Quincy, Ill., who made a long European tour last year with William Streiff, is now planning a motorcycle trip to the Pacific Coast and is on the lookout for a traveling partner. Any rider having a similar trip in mind may hook up with an experienced tourist by dropping Joe a line at Quincy.

C. F. DIX, local F. A. M. commissioner in Stockton, N. J., and Indian agent for Stockton and vicinity, has now added Riegelsville, Pa., and Milford and Frenchtown, N. J., to his selling territory.

SUNDAY RACE MEETS.

COLUMBUS, Ohio.—Announcement is made that there will be races every Sunday afternoon at the Columbus Motor-drome. The meeting of the F. A. M. in the Buckeye capital and the attending races has stimulated interest in the motorcycle racing game in Columbus and central Ohio and no end of enthusiasm is shown over the announcement of General Manager W. H. Snyder.

A number of the Columbus riders who rode as amateurs during the F. A. M. meeting have turned professionals.



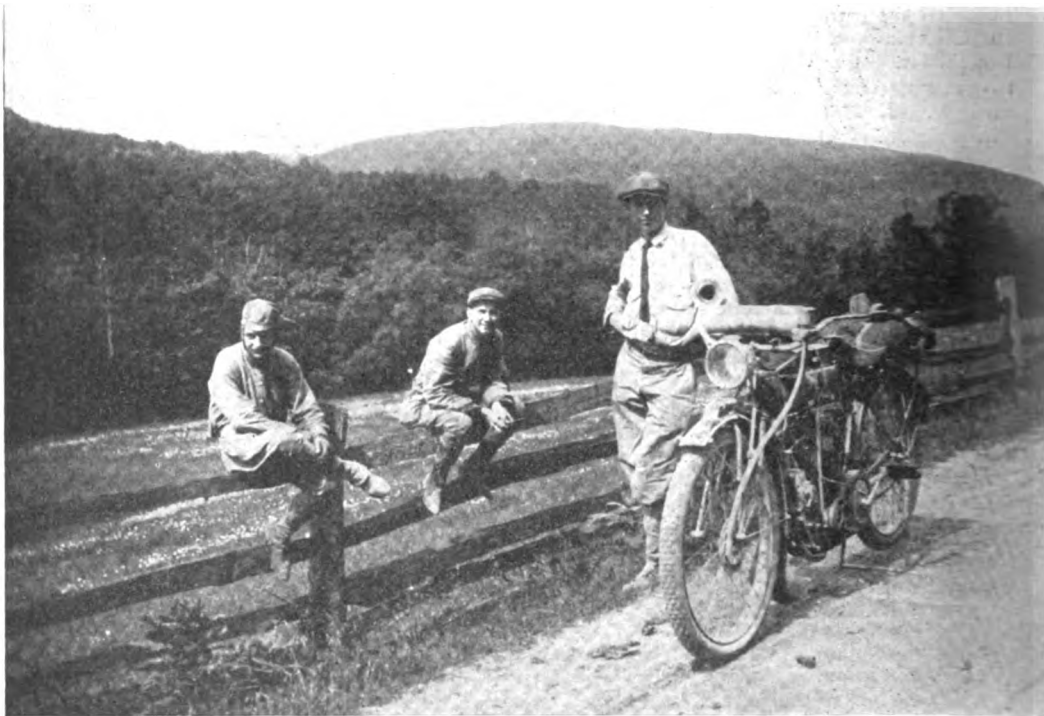
ONE OF THE BEAUTIFUL SCENIC SPOTS
IN BLUE RIDGE MOUNTAINS.

WE have all heard the mossy argument to the effect that "anticipation is better than realization," but the writer and his companions, who figure in the following narrative, are convinced that this theory does not apply to a motorcycle trip. The anticipatory thrills incident to mapping a touring program are not to be overlooked—there are so many adventures to be lived through in prospect—but in our case it was the actual road experience that introduced us to the joy of living. If this upsets the wobbly old adage above referred to so much the better. We are prepared to stand responsible.

We had no special schedule to follow, no certain mileage to be reeled off each day, when we left Atlanta on June 1 and our road policy was the broadest imaginable. Our aim was simply to derive the greatest possible enjoyment from each day's travel, whether we covered 50 or 150 miles, and our only definite provisions were that we should reach Springfield, Mass., in time to return to New York City on June 20, the date on which we had arranged to sail for Copenhagen, Denmark. We looked forward to big things but we were not worrying about them.

Solving Equipment Problem.

Before taking up the story of our trip northward from Atlanta it may be well to give a few details relative to the equipment of our machines. Details are not always interesting, but they are helpful if given from practical experience. As to the machines, all were twin sevens. A. H. Cooledge mounted a red Indian, E. M. Cooledge used a white Thor and I piloted a blue Indian, with D. Noon Hudson as my tandem passenger. It is worthy of note that the machines made up a combination of the national colors, red, white and blue; this, however, was not by prearrangement. The machines were new, two of them fresh from the crates, and my mount having been run only 250 miles.



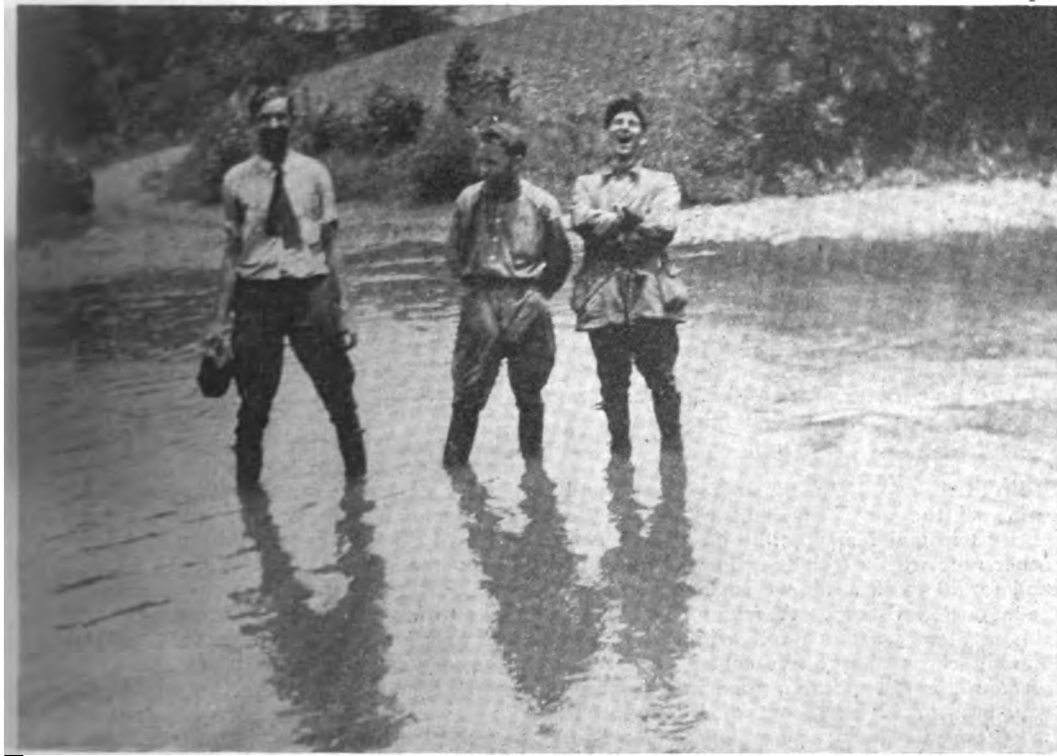
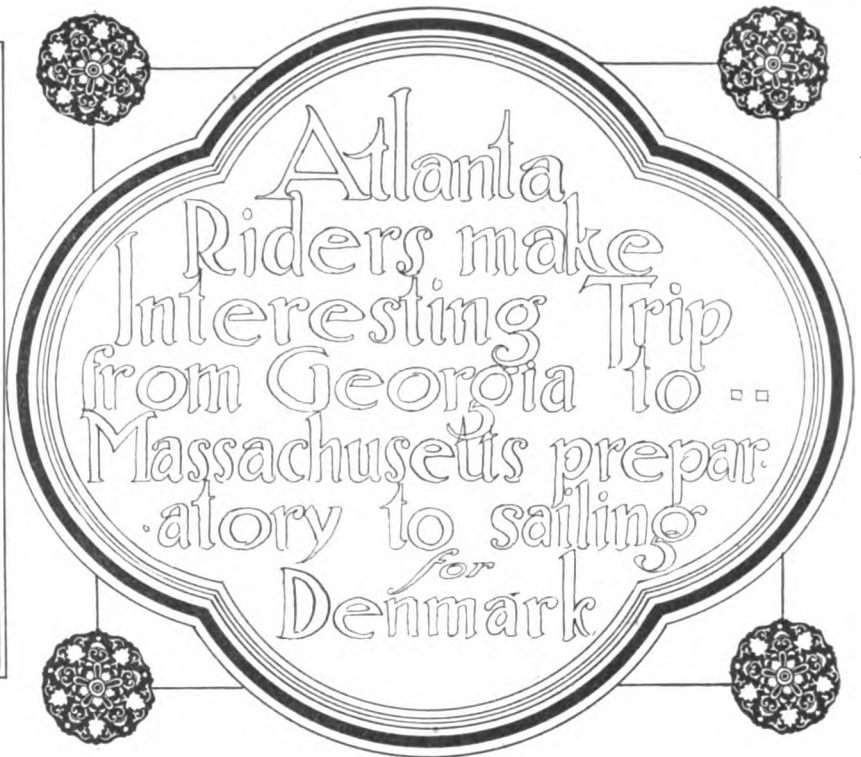
On the Way from Atlanta (Ga.) to New York.

Each of us carried a spare inner tube, three extra spark plugs and duplicates of as many of the different nuts and bolts as we could get; also two valve springs each, exhaust and inlet. Emergency valves should always be carried, but we were unable to secure these before starting. For machines with cradle forks, spare rubber bumpers, both upper and lower, should be taken and put on as soon as those in use show any signs of wearing out under the heavy work of the spring action. Some rivets for the grip control are of great value when one

is broken, and a number of these should be taken. Of course chain links and offset links should be carried in goodly numbers. At least two tire sleeves with steel hooks to go under the clincher should be taken for an emergency, and substantial luggage carriers should be fitted. On the rear of my machine a Majestic tandem attachment was fitted and it proved as comfortable as could be expected. We each had a cyclometer when leaving, but two were lost on the way; the third also shook off, but fortunately the rider saw it fall and



PACKING UP "OLD GLORY" ON THE
GETTYSBURG BATTLEFIELD.



One of the Streams Forded in the Virginia Hills.

found it. In this connection it might be said that the brackets for the cyclometers are not sufficiently strong for the heavy work which they have to stand. A. H. Cooleage had a Warner and McKie a Jones speedometer. All machines were equipped with Goodyear tires. A right and left hand pedal spindle should be carried and a good horn is a necessity. As to the lamp, this is entirely up to the individual. The Cooleage brothers had Presto tanks and Old Sol lamps and I had a Vesta electric light and storage battery. The light

question should be looked after very carefully because a good lamp is essential when any night riding has to be done.

The Start from Atlanta.

Previous to putting the finishing touches on our motors we procured a passport to carry us into Russia and Turkey. This is obtained from the Department of State, Bureau of Citizenship, at Washington. The passport had to be approved by the Russian and Turkish consuls before it became valid. For this a nominal charge was made

and the passport itself costs one dollar. If possible, letters to all connections abroad should be obtained before sailing so that they may be used promptly in an emergency. Fortunately for us we had a letter to the American Consul at Copenhagen. We had all joined the A. C. U. of England, in the belief that this would be a great help to us wherever we decided to travel on our machines.

In leaving Atlanta we followed the New York *Herald-Atlanta Journal* route, using a map which can be procured from either of these papers. We had decided to go through Decatur and Lawrenceville, Ga., first striking the so-called "National Highway," about 45 miles from Atlanta. In this way we avoided some deep sand, but missed some good macadam road. The roads were very good, that is, the ordinary clay roads, until we got five miles the other side of Winder, where they had been recently worked and a heavy rain about a week before had made them bumpy. However, this condition lasted only five miles, and after Jefferson was reached the roads were good again. Nightfall found us at Carnesville, Ga., the mileage for the day being 97.2. In view of the late start, we considered this good enough for the afternoon, so decided to spend the night in Carnesville. Before going to the hotel we filled the machines with gasoline in order to be ready for an early start in the morning.

Into South Carolina.

Here the regular charge for supper and lodging was one dollar. We always made it a practice to get an early start in the morning and ride 25 to 50 miles before breakfast. We never ate a midday meal, arguing that we did not care to ride in the hot sun with that exceedingly unpleasant feeling that goes with an overcrowded stomach. This plan is to be recommended to all long-distance riders. And still another important thing that must be impressed on the minds of all riders is that

they should dismount when a fractious team is met; push the machine by, or adopt the most suitable plan in each individual case. The delay caused in this manner is exasperating, but much cheaper in the end, because in case of a runaway it is certain that the farmer will be given the preference in any country courtroom where a damage suit might be heard. It is a strange thing, too, that if a motorcyclist runs over a chicken in a public road and gets caught, it is invariably the prize winning barred rock or the finest buff oppington that he killed.

We got an early start the next morning, Sunday, after a quick inspection of our machines. After traveling 10½ miles further we reached Lavona, Ga., over fairly good roads. We were still too early for breakfast. We were now only five miles from the Georgia-South Carolina State line, and opening up a little we soon covered this distance. On entering South Carolina we were confronted with many different kinds of roads, deep sand for a while, shallow sand, then hard and bumpy clay roads. This condition lasted until we were within eight or ten miles of Anderson, where we struck a very fine clay road and reached the city about 8 a. m. After a wait of half or three-quarters of an hour for two of the boys we had breakfast. At 10 o'clock we were just ready to start back when the others came in, explaining that the bolt holding the coaster brake arm on one of their machines had come out, allowing the arm to wind around in the frame, throwing the rider. It had become so firmly wedged in the frame that the rear wheel had to be taken out to right matters. All the coaster brake makers should put on lock nuts or the assemblers should slightly rivet the end of the bolt so that the nut cannot work off.

Delayed by a Storm.

We were soon off on fair roads, striking an occasional sand bed, dodging ruts, dogs and chickens (the eating variety) until we reached Greenville, S. C. Through this city we followed the car tracks and had little difficulty in finding our way out. We had no occasion to stop in Greenville, so went right on into Spartanburg on very much the same kind of roads we had been having. In Spartanburg we met a number of riders who were out for a Sunday spin. We were advised that just out of Cowpens a bridge on the main road had been washed down a month before and never rebuilt, but by making a detour about five miles to the left we would avoid the ford which was rather too deep for a motorcycle. This we did and the next town was Gaffney. We stopped here for a few minutes pending the outcome of a dark cloud that had been gathering in the skies for some time previous. It soon started to rain and it certainly did a good job, to the entire satisfaction of the farmers in that section. We were forced to stay in Gaffney that night, after covering 136 miles on poor roads.

Monday morning we left Gaffney quite early, little thinking that this was to be our best day on the entire trip. It seemed that the further North we went the lighter the rainfall had been and after much of the familiar "snaking" on the muddy roads, we reached Kings Mountain, N. C., some 23 miles from Gaffney. From Kings

Mountain we had excellent roads as the rain had not gotten that far North. So good were the roads that a challenge from a passing train was accepted and for a number of miles we raced with the train, from Gastonia to Bessemer City. We were beaten, but not much, the train having just left the town as we rolled in. All the way to Charlotte the roads were entirely satisfactory. There are two routes that go into Charlotte. The one we chose was the shortest and crosses the Catawba river on



Atlanta Tourists at Gettysburg.

an old-fashioned ferry at a cost of 10 cents. The other route is some 12 or 15 miles longer and crosses the river on Rozzell's iron bridge. In Charlotte we filled up with gasoline, purchased some piano wire for spare grip control on one of the machines, and went on toward Concord. We had been informed that the roads to this place were very poor, but with the exception of a couple of deep sand beds, we were agreeably surprised to find fair going.

All Kinds of Roads.

From Concord to Salisbury we found some of the most excellent roads on the entire trip and lost no time on them. Another race with a freight train was in order and for 10 to 12 miles we rode at a terrific pace into Salisbury. A few miles out of this city we crossed a toll bridge over the Yadkin river; charge five cents. The road after this is not quite so good into Lexington, but for 12 miles out of Lexington it is excellent, being macadam and oiled. Winston-Salem was soon passed and for six miles out of this place the road surface is atrocious. This part of the road must have been built by Columbus shortly after his arrival here, and repairs on it have been overlooked ever since. After passing Kernersville, ten miles further on, we entered rather wild country, the towns being farther apart and very small. The roads, however, were fairly good and we pressed on with all "sane haste" before dark. There was nothing to watch but the National Highway signs until we crossed the Dan river, going directly into Madison, where we spent the night. Mileage for this day, 186.1. Our machines were rolled into the lobby of the "hotel" and we had a good

supper. We were now in the Blue Ridge mountains with 85 miles of the hardest kind of road work ahead of us.

We had to adjust our chains some time the next day previous to climbing the mountains and decided to ride a few miles out into the country and find a suitable spot, which we did five miles out of Madison. After all adjustments had been made and I had put the last nut on the rear axle, the threads were found to be stripped. Things surely did begin to look gloomy; five miles from an imitation town and at the beginning of the worst mountain on the journey. The spare rear axle we had along was fully half an inch shorter than the useless one, allowing only about three threads on each side to hold the wheel in the machine, and there was no provision for the tandem attachment. We tried attaching the tandem to the stand bolts, but there was nothing doing, so we compromised by taking the mudguard braces off and putting the tandem supports where the braces had been. This left the mudguard to rattle, which it certainly did, with skill and precision. After about five hours' work, we applied at the farm for breakfast, which was cordially furnished to us, the charge being left entirely in our hands.

We proceeded on our way, living in hopes that the one-quarter-inch bolts would hold the tandem, and they proved equal to the task during the entire run to Springfield. The Virginia line is only seven miles from the scene of our breakdown and we made short work of this distance. Immediately on entering Virginia the roads were really bad. The first town, if it can be so called, is Ridgeway, and ten miles more brought us to Martinsville. For the last two miles before entering Martinsville, the road is nothing but a deep sand bed winding along beside the river bed, and with two persons on one machine it could not be ridden with any degree of comfort. Anyway we made it without anything more serious than a few falls.

Fine Scenic Route.

In Martinsville we purchased gasoline and rode on to the next town. Some small railroad stations were passed and fourteen miles out of Martinsville we entered Franklin County, which ought to be noted for its ill-kept roads. Rocky Mount is 32 miles from Martinsville and there are many large creeks to ford. Mountains must be climbed with practically no road at all, and the houses are sometimes ten miles apart. The scenery is wonderful, with the tree-covered mountains on all sides, the season's flowers in full bloom, the mountain streams and wild country. Plenty of time should be taken for this part of the trip by the lover of nature. Eleven miles north of Rocky Mount is a post office station called Synnorsville, and a store operated by a Mr. Ramsey. The latter takes care of all tourists who get caught between towns, and as it was nearly dark when we reached this place we decided to spend the night there. We had an excellent supper and good beds. Mileage for the day, 54.4. This bad showing was due to the trouble we had early in the day.

The next morning we got our usual early start, knowing that we were in for another hard day over the mountains.

(To be continued.)

BLAZE DESERT TRAIL ON MOTORCYCLES

Two Phoenix Tourists Ride Single-Cylinder Machines Through Burning Sand to Los Angeles Over Route Hitherto Unconquered by the Single-Tracker.

MAURICE VALENTINE and Joseph O'Donnell, motorcycle enthusiasts of Phoenix, Ariz., recently added an interesting chapter to the history of the motor two-wheeler in Pacific coast territory by riding from their home city across the desert to Los Angeles. Several intrepid motorcyclists have started into the sandy waste only to return exhausted and with their machines battered and practically useless, but the Phoenix boys could not be persuaded to abandon the plans for their trip. The journey is conceded to be a hazardous one for any vehicle, and doubly dangerous for a motorcycle, owing to the difficulty encountered in carrying sufficient gasoline, oil and water. Not long ago a motorcyclist who attempted to cross the desert along the route of the proposed National Highway was found by an automobile party lying in the burning sand in a critical condition and with his gasoline tank empty.

Undeterred by the stories of these experiences Valentine and O'Donnell, both still in their 'teens, plunged into the desert and came through with flying colors. When they rode into Los Angeles they were not nice to look upon and their machines showed the effects of hard usage, but they had ridden all the way and enjoyed the satisfaction of blazing a new motorcycle trail.

What renders the trip all the more remarkable is the fact that the Phoenix tourists did not use high-powered machines. For such an arduous trip it might be taken for granted that they would ride 7 h. mounts, but they depended upon two Thor 4s to carry them through. The machines were battery-equipped and only one was fitted with a free engine. Few riders, even of wide experience, would have undertaken the journey on twin machines, and the decision to attempt it on singles was looked upon in Phoenix as foolhardy. However, the boys managed to make headway at all

times, although some of their struggles in the deep sand threatened to end in defeat.

Even when their canteens sprung leaks and left them with no water they did not think of turning back out of the desert. Instead they plugged onward through the sand until a water hole was reached. They arrived at this haven exhausted from heat and thirst, but only a short stop was made. With the canteens refilled they again headed for Los Angeles, making slow but steady progress. In many places along their route a motorcycle had never been seen before, and the machines were objects of great curiosity to the inhabitants of the small towns and mining camps. At Harrisburg, a small mining camp, several old-timers who have lived in the camp since 1879, delayed the riders nearly an hour with their questions concerning the strange "two-wheeled automobiles."

The riders followed the old Los Angeles-to-Phoenix race course, passing through Winter's Wells, Salome, Vicksburg, Bouse, Quartzville and Ehrenburg, Ariz., and then through Blythe and Mecca, Cal. From the latter place they followed the railroad to Los Angeles. They started Wednesday morning, July 17, and reached Los Angeles on the morning of July 22, spending the last night of their trip at Pomona, where they replenished their sadly damaged wardrobe.

The difficulties of the trip are demonstrated by the fact that in one day, when fighting their way through deep sand, the boys made only twenty-six miles. Striking better, roads, however, they made from 125 to 150 miles a day on the last days of their journey. Near Blythe the riders met with the only insurmountable obstacle of the trip, when they encountered a stretch of country which had been flooded by a cloudburst. The mud was so deep as to be impassable and they were compelled to have the machines hauled two miles in a wagon. Valentine and O'Donnell remained in Los Angeles several days and then shipped their machines back to Phoenix, returning them-

selves by train. Both are heartily pleased over their success in making the trip, but, as Valentine expressed it, "Once is enough."

WHIPPLE EXTENDS HIS TOUR.

WHIPPLE, the motorcycle man of Chicago, found the tour to Columbus so pleasant that he decided to make a trip eastward before heading for the Windy City again, and at latest reports he was in the Adirondack region. "Whip" found good roads leading into New York State, and in his opinion the route along the Hudson and into the Adirondacks is one of the best in the country. "Never dreamed that a motorcyclist could knock so much genuine enjoyment out of a trip as I have derived from this one," writes the Chicago dealer.

ON 2,500-MILE TOUR.

URBAN KREIDLER, George Goodwin, John Staffer and Chris Weiber, Jr., of Dayton, Ohio, are enjoying a 2,500-mile tour on their motorcycles through the Eastern states. Their route carries them through Cleveland, Buffalo, Syracuse, Rochester, Albany, New York City, Atlantic City, Philadelphia, Baltimore, Washington, D. C., Hagerstown, Wheeling, Columbus and back to Dayton.

AN EMERGENCY REPAIR.

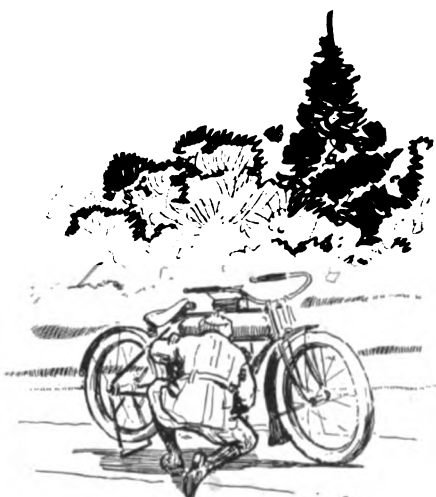
AN experienced rider passes out the following tip: If a small puncture is sustained and no patches are at hand a carefully applied section of a broad rubber band will effect a good temporary repair. As the surface of the rubber band is so limited, the cleaning of both the tube and the patch with emery paper and gasoline must be particularly thorough.

A PROFESSIONAL SCOUT.

HARRY M. NEER, of Jackson, Ohio, earns a good salary by "pathfinding" on his motorcycle for a firm that publishes road maps in Indianapolis.



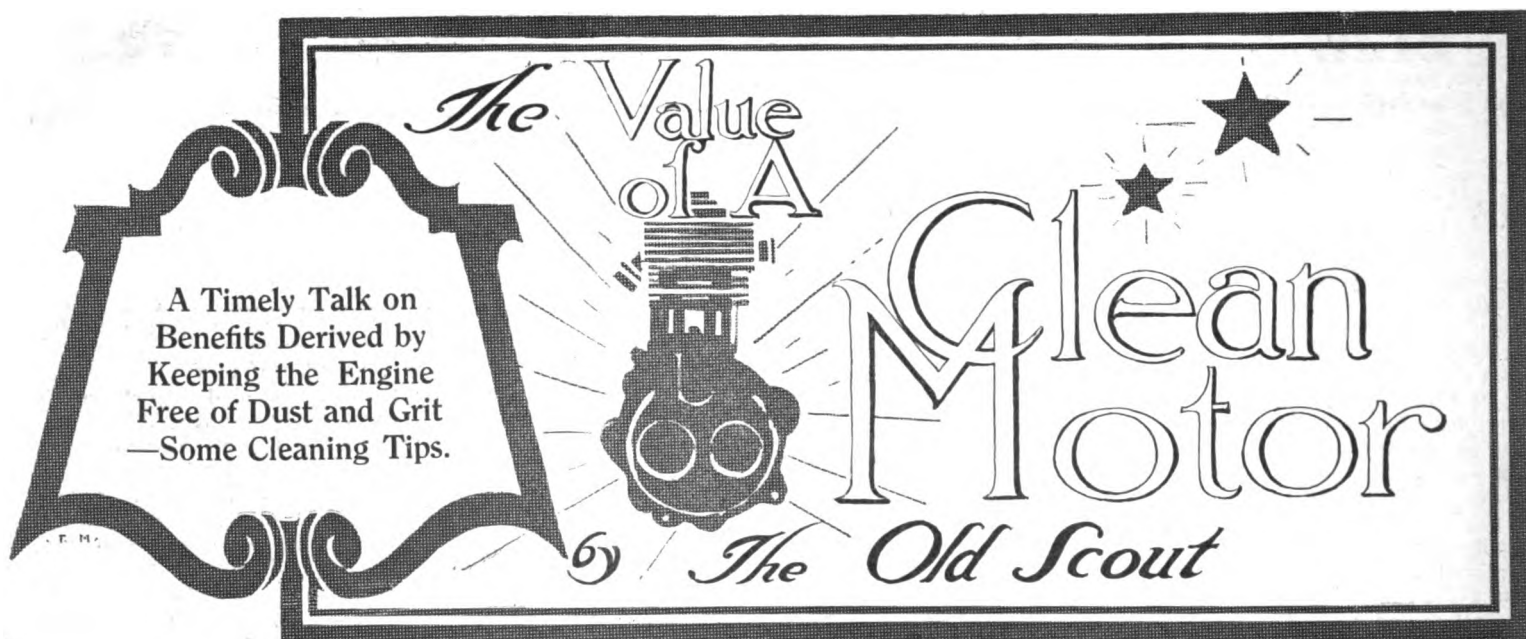
Stop



Look



Listen



OCCASIONALLY one will meet a rider—I have done so, and I suppose that other members of the brotherhood have—whose motorcycle always looks as if it had just come out of a combined oil and mud bath.

"Your machine hasn't been cleaned lately, has it?" I once remarked to one of these riders.

He did not resent the implied criticism in the least, though I had rather expected he might answer to the effect that it was none of my business.

"Oh, no," he rejoined, "I hardly ever touch a rag to the old tub," and there was actually a ring of genuine pride in his voice as he made the admission. I don't see where the pride could come in, unless on the ground that the machine kept going at all under such treatment, in which case the pride was not rightly his, but the maker's of that machine.

Riders like the above are not common, but they do exist, and really they ought to be legislated out of existence. There are so very many good arguments in favor of keeping a motorcycle clean, and so very few against it! I don't know that my own mount could always serve as an example of what a motorcycle should be, but I realize the importance of proper treatment, and try to live up to my convictions. I aim to give the machine a thorough cleaning about once in so often, depending, of course, on how much I use it and the condition of the roads. Fifty miles done over a good tarvia surface may leave your motorcycle practically as clean as the hour it left the factory, while five miles of mud plugging will make it look like a relic of bygone days.

Grit Is Dangerous.

I have already mentioned the fact that there are many reasons why a motorcycle should be kept clean. Suppose we consider a few of them. First of all, and this ought to appeal to every rider, there is the damage that may be done to the machine. I say *may* be done; the motorcycle of today is so well constructed—in most cases, at least—that very little of the dirt which

settles one the engine and frame can find its way into the bearings or other places where it might do harm. There is no need for any moving parts to be exposed, and usually they are well protected. However, it is not at all impossible for a little grit to work a passage in, and anyone who has had experience knows how disastrous an effect such material has when it is given half a chance. Places that are especially apt to suffer are the bearings of the front and rear wheels, and the chains and sprockets of a chain driven machine. The proper idea is to see that the dirt has no chance at all.

A dirty engine does not cool readily. The motorcycle power plant, depending as it does entirely upon radiation and an air current to carry off the heat, of necessity works at a very high temperature. Up to a certain point the engine delivers more power when hot, but beyond this point the power falls off tremendously; overheating is the main cause why machines sometimes fail on hills. It may be that the incoming charge of gas expands so rapidly within the overheated engine that there is not room for the normal charge to be sucked in. But whatever the cause, an overheated power plant is not a thing to be sought after. Now a thick coating of road dirt and oil lodged in between the flanges will not help the cooling process a little bit.

Cleanliness Boosts the Sport.

The good of the sport in general furnishes another good argument for cleanliness. "Dirty and noisy" are adjectives often applied to motorcycles by their enemies. The noise proposition is not now so prominent as formerly, owing to improved mufflers, as well as because riders are learning that while open exhaust pipes may be permissible out in the country, they are decidedly out of place in cities. It remains to show the public that motorcycles need not be dirty.

There is yet another reason, though perhaps not so important as some of the preceding. A rider should have enough personal pride to let his machine make a decent appearance. A motorcycle is a good

thing; it deserves only the best of care and attention. When I see a machine that is *always* dirty on the outside, I wonder as to its condition on the inside. Carelessness in one way is likely to travel with carelessness in others, and the rider who never cleans his machine probably abuses it aside from that.

The very act of going over the frame and engine with a bit of waste may bring to light matters requiring adjustment or attention, which otherwise might have been overlooked until serious trouble developed. The vibration of the engine often causes nuts to loosen, and such little details may escape the rider unless he forms the habit of looking for them. And there is no time when he is more apt to make discoveries of the kind than when giving the old bus a good rubbing down.

Using a Gasoline Bath.

There is more than one method of cleaning a motorcycle. I have known of riders who left their machines go a month with no attention, and then were satisfied with playing the garden hose on the poor creature for ten minutes or so. That should never be done if one values in the least the good looks of his motorcycle, for it will be almost impossible to get off all the water before the metal begins to rust. And besides the treatment is of little effect from the cleaning standpoint. A fair amount of the dust on a motorcycle is greasy. It is likely to consist largely of dust combined with oil, and cold water will remove oil about as readily as strong language will remove a punctured tube from its casing. The hose method only starts the job, and then it must be done again from the beginning.

I have a definite system in cleaning my machine—that is, when I wish to do a thorough piece of work. Very often I go over the exposed parts and give a hasty polish, but for a real clean-up I follow out different tactics. The tools I employ are a broad, shallow pan, a paint brush, and a quart or so of gasoline. The engine itself, of course, requires more attention than any other part, because of the oil that may

escape via the exhaust valve tappets or main shaft. I place my pan, with some gasoline in it, under the crank case, and then get busy with the paint brush. By its aid I can explore all the inmost recesses and corners back of the valve springs and stems until every particle of oil and dirt is removed. It is also a simple matter to clean out whatever dirt has settled between the flanges. The gasoline trickles down into my pan, and so instead of being wasted, can be dipped up again and again by the brush. To be sure, it evaporates rapidly, and so the supply must be renewed from time to time.

A Novel Milk-Bottle Pump.

I treat the whole machine, wherever necessary, in this way. Where there is no oil to cause the dirt to stick, as on the gas tank, for example, or on the frame, there is no need of using gasoline. A little rubbing with cotton waste, helped out by elbow grease, will do the trick. As the gasoline evaporates from those parts of the machine where it was applied, it leaves a whitish film or coating. This will rub off very easily, however, and after the finishing touches the machine will be spotless.

I have a little device that I sometimes use in cleaning my motorcycle. It is made from a quart milk bottle. In the cork are two holes—one contains a common tire valve, the other a copper tube reaching to the bottom of the bottle. Attached to the outer end of the copper tube is a foot or two of rubber tubing, and at the end of this is a glass nozzle. If you fill the

bottle half full of gasoline, and then connect a pump to the valve and give her a moderate amount of pressure, a fine stream of gasoline can be shot out with considerable force. It is great for cleaning parts of the machine that are hard to get at, but goodness! how it does use up gasoline! I tried it several times, and then concluded to stick to the paint brush method, for, though it was not so much fun as the other, it was much more economical.

More Cleaning Tips.

It is always best to clean a motorcycle when the engine is hot, and the oil or greasy dirt is then in a condition to be easily removed. It is not convenient to clean the machine as it comes in from the road, let her engine run a moment on the stand before you get busy. There is one other tip that I have found to be well worth while in my periodical cleaning up spells. My hands used to be a sight for sore eyes after I had finished, until I hit upon the scheme of wearing cheap canvas gloves. These can be purchased at most stores for ten cents a pair, and they keep one's hands, fingers, and finger nails free from dirt and grease.

Even though it is something of a nuisance and a bother to spend the time required to thus give the old bus a chance to look decent, it is time well spent. You will feel repaid for it by the mere consciousness that you are riding a splendid, shining machine, instead of one whose natural beauties are concealed under an artificial complexion of oil and dust.

RACES AT FORRESTVILLE.

THREE races will make up a Labor Day program to be staged at the Sansbury track in Forrestville, Md. There will be a professional race, one for amateurs and a novelty contest between a motorcycle and a race horse. Riders from neighboring cities have agreed to participate and the members of the Washington M. C. in particular are assisting with the plans.



O. G. Van Lang, of Fort Ogelthorpe, Ga.

BACK FROM BRITISH TRIP.

JACK GIBSON, manager of the bicycle and motorcycle department of the Canada Cycle and Motor Company, Toronto, returned recently from a business tour of Great Britain, when he looked thoroughly into the British motorcycle industry as a step towards the establishment of the proposed big motorcycle plant of his company.

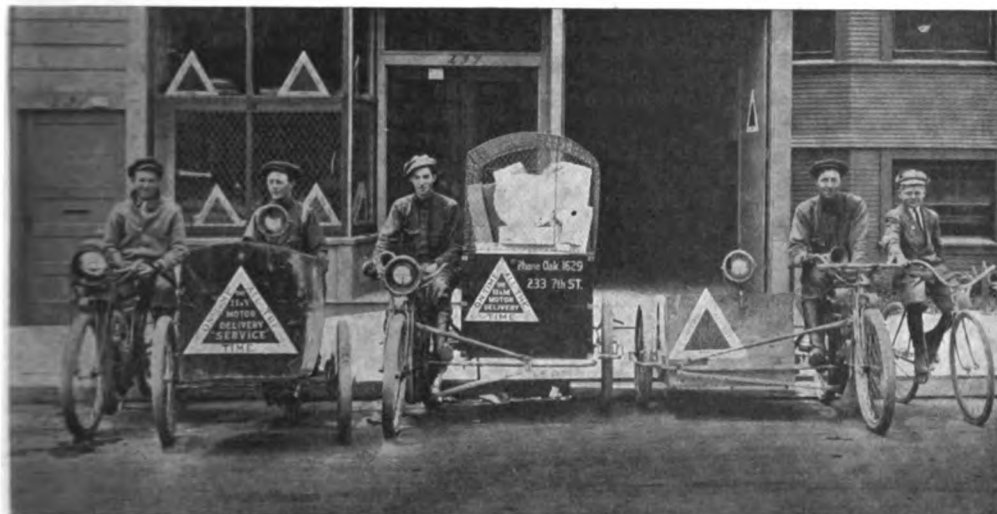
The home for this new big Canadian industry is rapidly nearing completion at the Canada Cycle Works, West Toronto, and extensive experiments are being undertaken by a staff of mechanical experts and engineers, with a view to producing a highly efficient and up-to-date motorcycle.

A NEW OBJECTION.

IT has been announced through the newspapers of Cleveland, Ohio, that the motorcycle tax will be increased to \$3 for the coming year. Heretofore it has been \$1.50, and Councilman Laferty has made the statement that too many machines are already in use in Cleveland and thinks it time to increase the taxation. The club has put a plea against the increase to Mayor Baker.

HENDERSON RIDERS.

FOUR Henderson riders of Binghamton, N. Y., appear in the accompanying photograph. From left to right they are Walter A. Phillips, C. Fred Goetcheus, Walter J. Lyon and Leighton Pratt. Goetcheus is treasurer of the Binghamton M. C. and Lyon is president of the club and agent in Binghamton for the Henderson machine.



FOR OAKLAND DELIVERIES.

FOLKS in Oakland, Cal., who want packages delivered in record time have developed the habit of calling upon Holroyd & McCrea, proprietors of the quick delivery service in which the three vans shown in the photograph are used. Holroyd introduced Oakland to the van delivery idea and found that

the motorcycle system filled a wide breach. As a result the firm is rushed with business, and it is likely that additional vans will be put on in the near future. Two motorcycles are also used for emergency work and messenger service. Holroyd is mounted on the machine at the left and McCrea occupies the saddle of the novel outfit at the right.

RACES AT BIG FAIR.

THE Canadian National Exhibition, the greatest permanent fair on the continent, held annually at Toronto, will wind up this year, as usual, with a big national field day on September 7, when a number of bicycle and motorcycle races will be staged on the exhibition half-mile ring.

FOR FORESTRY SERVICE.

PENNSYLVANIA State authorities are always progressive, and the Forestry Department has ordered fifty Reading-Standard twins for use by the rangers in all the preserves and stations in that State. The order was given to William G. Rhodes, Philadelphia agent for the R-S.

ANOTHER TRACK RECORD

Chapple Lowers His Old Mark for the Mile at Brighton—Albright and Constant Also in Fine Form.

BRIGHTON BEACH, August 5.—Arthur Chapple established a new mile track record at the Brighton Beach Motordrome last night by racing around the three-lap course in 38 $\frac{1}{4}$ seconds, smashing his old mark of 39 seconds by a fifth of a second.

The new mark was hung up in a contest against time. Chapple, on his favorite wheel, clung to the white line without diverging from it a fraction of a second. His ability to cling to the mark really won the record for him. Chapple made the first circuit in 14 $\frac{1}{4}$ seconds, completed the second lap in 25 $\frac{3}{4}$ seconds and the third in 38 $\frac{1}{4}$ seconds.

The four-mile match race between Hartley Thomas and Ray Peck was won by the latter. Peck took the lead in the first heat and won by three wheel lengths in 2 minutes 55 $\frac{1}{2}$ seconds.

A special event not down on the program, a match race for three miles between the amateur riders, Johnny Constant and Johnny French, was won by the former in straight heats. Constant turned the first three miles in 2 minutes and 23 $\frac{1}{4}$ seconds and the second in 2 minutes and 17 $\frac{1}{2}$ seconds.

Johnny Albright won the five-mile professional race. He came back in the second heat in faster time than he made the first heat, spinning over the distance in 3:51 $\frac{3}{4}$, two-fifths of a second better than he had done in the first heat.

Chapple came back later in the night and rode in a two-mile sprint against time, establishing a new track mark of 1:18 $\frac{1}{4}$. He continued his marvelous line-clinging, making the six laps and the crowd accorded him an ovation at the finish.

Hartley Thomas had practically a walk-over for the second heat of his four-mile match with Ray Peck. For three miles it was an interesting struggle, both men alternating in pacemaking up to the final mile. Peck then experienced motor trouble and Thomas drew away and won by nearly a lap in 3:03 $\frac{1}{2}$. This success of Thomas made the honors even, as Peck had previously won the first heat.

Peck, who had trouble with the intake valve of his machine in the second heat, was unable to patch up the trouble for the third and was forced to ride a new machine, Johnny Albright's regular motor.

The change in gasoline steeds did not seem to bother Peck, for he won the race by a quarter of a lap from Thomas. The distance of the third heat was cut four miles to three. The time for the last lap was 2:16.

Albright won the ten-mile handicap, with one lap start, in 6:59 $\frac{1}{2}$. Arthur Chapple, the scratch man, was second, beaten 50 yards. Ferdie Mercier and W. H. Wray finished third and fourth respectively.

BRIGHTON BEACH, August 3.—In the feature event at the Brighton Motordrome tonight Arthur Chapple vanquished Johnny Albright, the Denver flier, in straight heats. In the first heat it was either man's race until the last lap, when Chapple took the lead and won by 10 yards. In the second heat Albright rode neck and neck with Chapple for the entire distance of four miles, but Chapple won out by six inches at the finish.

In the five-mile professional race, Ferdie Mercier, of Brooklyn, was the shining light, winning two firsts and a second place in the three heats. He carried off the honors with thirteen points. W. H. Wray was second with eight points, and F. A. King was the runner-up with five points.

Plenty of excitement was furnished in the 10-mile handicap. Johnny Albright allowed liberal handicaps to his opponents, King, Mercier and Wray, having two laps, and Fleckenstein three laps. From start to finish Albright rode at the rate of 85 miles per hour, lopping King five times, Wray four times and Mercier three times. Fleckenstein was out due to a hot engine.

It was necessary to run three heats in the special three-mile amateur match race between Constant and J. B. French. The former won the first heat by a foot, after a seesaw race. French captured the second heat in easy fashion, and in the final heat Constant took no chances and gained a comfortable lead which he held until the finish, winning by 10 yards.

This was the first night that it was necessary to allow the spectators to use the infield. The grandstand and bleacher seats were filled at 8:15, fifteen minutes before the races were scheduled to start, and the overflow was turned into the paddock where

three hundred people stood during the program. Over 10,000 people were in attendance.

A novel feature was introduced at this meet. A tall pole, at the top of which is a series of varied-colored electric lights, had been erected in the center of the Stadium. At the start of each race the white lights are flashed, and at the last lap the green lights are switched on. At the conclusion of each race the red lights are burned. This system of announcing the progress of each event is unique and is, in addition, to the regular method of announcing by megaphone.



P. M. Mouldew, W. R. Morrison and George W. Beall on their way back to Washington, D. C., from Columbus, on Goodyear tires.

SWARTZ WINS GREAT RACE

In Fifty-Mile Whirl at Denver He Leads Field and Finishes Dazed and Blind.

DENVER, Col., August 5.—Ed. Swartz won the hottest long-distance race ever pulled off on the local saucer on Sunday, August 4, in the remarkable time of 37 minutes 24 $\frac{1}{2}$ seconds for fifty miles. The last few miles he rode practically blind, not knowing where he was going, and only his unequalled grit and rider's instinct permitted him to finish the race without accident. Swartz was unable to see the flag at the close of the race, and continued to speed around the saucer some little time after the race was over, finally coming down on the running board, where he was seized by friends and taken to a physician, where he remained for two hours, until his sight was partially restored.

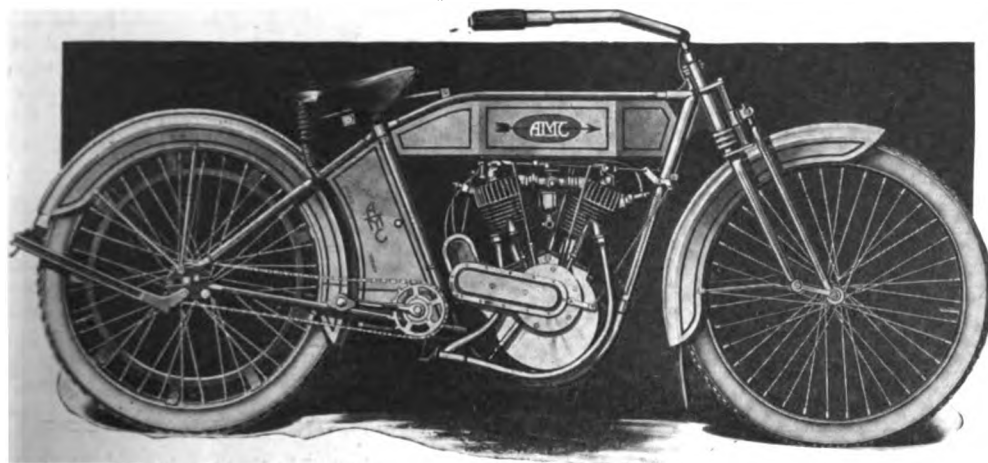
Six of the original ten entrants faced the starter, but after the tenth mile it was plain the race was between Edw. Swartz, "Slivers" Boyd and "Curley" Fredericks. Swartz took the lead and was only headed on two occasions, in the twenty-sixth and thirty-fourth miles, when Fredericks managed to forge to the front, but in each instance he held his position for only a portion of a lap. Next to Swartz, Boyd made the gamest ride. He had engine trouble in the first mile, and before he got his machine in running order again, the other riders had lapped him. He took up the pace and stuck to Swartz and Fredericks the remainder of the fifty miles; several times he jumped out in front to regain the lost ground, but was unsuccessful until near the close of the race, when he regained so much ground that he was beaten by less than a lap. Ted Hurlbut and Red Parkhurst made their first appearance as professionals and made very good showing, Hurlbut covering forty-six miles and Parkhurst covering thirty-three miles; the latter was forced to stop for repairs in the eleventh mile and lost ten miles.



Squad of Baltimore enthusiasts ready for a recent Sunday run.

NEW COMPANY PERFECTS TWO MODELS

Allied Motors Corporation, Having Enlarged Former Armac Factory in Chicago, Will Market Attractive Single and Twin Types for 1913—A. J. Musselman Heads a Hustling Organization.



THE Allied Motors Corporation, with an up-to-date factory on Carroll avenue, Chicago, is bringing out the new A. M. C. motorcycles, which present many interesting points for the rider and agent. The machines are made in two models, a single, with $3\frac{1}{4}$ bore and $3\frac{1}{2}$ -inch stroke, and a twin of the same dimensions. The valves are all mechanically-operated, the inlets being over the exhausts in a single pocket and operated by overhead rocker arms. The plugs are located on the twin in the front and rear, respectively, of the front

and rear cylinders. Ignition is by either Bosch or Herz magneto, as desired, and the magneto is behind the cylinders, where it gets ample protection. The frame is of the loop type, with twin top-tube. The brace tube is flush with the tank, while the top tube projects.

A new type of spring fork is used. The live members are linked to a traveler which moves between shock and rebound springs on a bar attached to the front of the steering tube. The live and rigid forks are connected by links, at the bottom and the

wheel axle is attached to the end of the live forks. The mudguards are large and have extensions at the sides of both rear and front wheels to prevent mud splashing. A metal tool box is fitted between the seat mast and rear mudguard. The transmission is by flat or V-belt or chain, as desired, and an Eclipse clutch is regular equipment. Bowden wire control is fitted, the sheathes being enclosed in the handle bars. The motors are respectively rated at $4\frac{1}{2}$ h. for the single, and 8 h. for the twin.

The standard coloring will be cream, striped with gold. The tank is panelled off in three sections and the name A. M. C. will occupy an oval in the center. The prices are \$200 for the single, and \$250 for the twin. The output for 1913 will be 2,000 and deliveries will begin in six weeks.

The Allied Motors Corporation has among its officials A. J. Musselman, president; O. F. Frischkorn and Mr. Wagner, sales managers, and Albert Durand, factory superintendent. The factory is that formerly used by the Armac Motor Company with a large addition. It will have the assembling department in the new space leased, with a stock room connecting this with the old building and the offices facing on Carroll avenue.

BENEFIT MEET AT DENVER.

DENVER, Col.—There was a large attendance at the benefit race meet for the flood sufferers, held at the Tuilleries Motordrome on Saturday, July 27, and but for the fact that showers fell throughout the afternoon the program would have been even a greater success. As it was, the relief fund for those who were left homeless by the recent floods in Cherry Creek was materially increased. The racers contributed their services and entered into the events with as much vim and determination as if they had been riding for big purses. Each rider reeled off an exhibition mile before the actual program was started and the efforts of the boys to hang up new figures scored a hit with the crowd. The two-mile open brought the fans to their feet cheering, as Bowen, Swartz and Patterson were bunched throughout the whirl. They finished in the order named. In the final "Curly" Fredericks made an unsuccessful attempt to lower the two-mile time for the track. Summaries:

One-mile time trials, pro, 61 class: Swartz, Indian, $45\frac{3}{4}$; Patterson, Merkel, :44; Bowen, Merkel, :43; Cox, Merkel, :42 $\frac{3}{4}$; Fredericks, Excelsior, :41 $\frac{3}{4}$.

Two-mile open professional, 61 class: Bowen, Merkel, first; Patterson, Merkel, second; Swartz, Indian, third. Time, 1:28 $\frac{3}{4}$.

Two-mile time trial, professional, 61 class: Fredericks, Excelsior. Time 1:21 $\frac{3}{4}$.

HAL DAVIS, a Phoenix (Ariz.) motorcyclist, is on his way to Chicago on his machine.

HELD POSTPONED RACES.

PORTLAND, Ore.—The races of the Portland Motorcycle Club, which were to have been pulled off on July 21, were postponed to July 28, owing to a heavy rain on the date originally chosen. One of the most interesting events was the economy contest, each rider being furnished with a soda pop bottle full of gasoline and allowed to go on the track to see how far he could ride. W. P. Brush, Merkel 4, took first place by going $5\frac{3}{4}$ miles. There were a number of laughable features about this event owing



Coffman and Ex-President Hamilton Talking it Over.

to the number of machines which had to be towed in from different points of the track.

The most sensational riding of the day was done by Harry Brant, Thor 7; he negotiated a mile in $54\frac{3}{4}$ seconds.

THE Prest-O-Lite Company, of Indianapolis, are opening a Canadian factory at Merriton, Ont.

FAVOR THE MOTORCYCLE.

MINNEAPOLIS, Minn.—The city council at Minneapolis is contemplating the purchase of a motorcycle for the underground wire inspector. An automobile was first thought the best thing to insure prompt inspections, but aldermen have been looking into the question and have found that the motorcycle will give as good or better service.

WORK has been started on the construction of a running track inside the new motorcycle bowl at Newark, N. J.



Mrs. "Doctor" Patterson Sizing up the Columbus Crowd from Aloft.

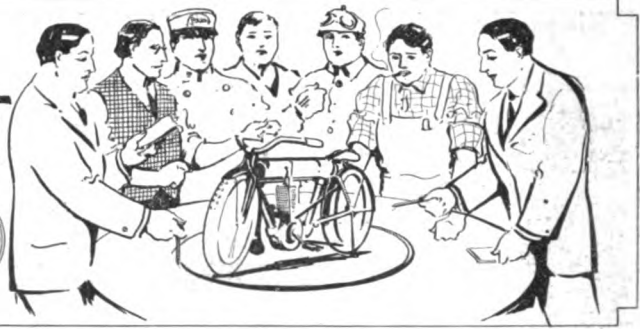
MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



THAT motorcyclists are taking deep interest in the Improvement Contest now being conducted in these columns, is evinced by the numerous suggestions received daily. Most of them are essentially practical, and all are worthy of close attention by those who are devotees of the two-wheeler. The first series of suggestions is published herewith. The conditions of the Contest are reprinted below for the benefit of those who have not read the original announcement in the June 27 issue of *MOTORCYCLE ILLUSTRATED*.

CONDITIONS OF THE CONTEST.

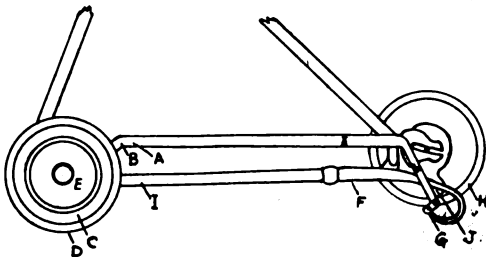
1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the best twelve suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

IMPROVEMENT IDEAS DESCRIBED AND ILLUSTRATED

REAR SPRING CONSTRUCTION.

1.—Spring rear construction for motorcycles. A is a jointed stay, B a brace from A, and C a clutch on the countershaft. The sprocket is indicated at D, and E is the pedal-crank aperture. A quarter-elliptic spring is fitted at F, its shackle is G, and I is the rigid rear stay. H is the rear sprocket and J the



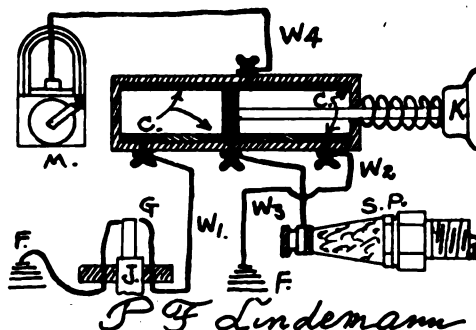
coaster-brake arm. Countershaft sprocket and rear sprocket to be the same size. The arrangement will tend to keep the wheel on the road for all kinds of going. Contributed by Peter Bissett, Winnipeg, Manitoba.

ONLY FOUR NUT SIZES.

2.—Four sizes of nuts and bolts only for use on motorcycles is another suggestion. For these four sizes, two double end or "S" wrenches would suffice instead of carrying a monkey or like wrench. Will tend to do away with the too frequent employment of pliers. Idea submitted by W. A. Siegbahn, North Tonawanda, N. Y.

FOR LIGHTING GAS LAMPS.

3.—Device for igniting gas-lamps by magneto. M is the magneto, and the switch is represented by the long cylinder. This latter has an outer casing of insulating material with an upper lining of metal (shown black) and contact plates C, C. A piston has a metal head and spring on its stem, the latter tending to keep the piston in midposition. K is the switch knob, and J the lamp burner. A spark gap G is fitted close to the beak of burner J and another opposite the first, the wire is then led to the frame F. S P is the spark-plug, and the various wires are W₁, W₂, W₃, and W₄. With the piston in central position the current goes from the magneto direct to the spark-plug. On pushing the knob K inward, the piston connects magneto and burner contact C and the spark jumps the gap G, igniting the gas at the beak. On pulling the knob K out-

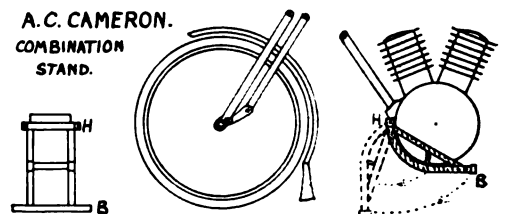


ward, the magneto is short-circuited through wire W₄ to the frame F. Contributed by Peter F. Lindemann, Bronx, N. Y.

A COMBINATION STAND.

4.—Front wheel stand acting as stand and crankcase guard. Left-hand view shows bottom (or front) view of stand, which hinges at H and has a foot at B. Hinges to forward part of crankcase, protecting the front of case from shock and the sides

A.C. CAMERON.
COMBINATION
STAND.



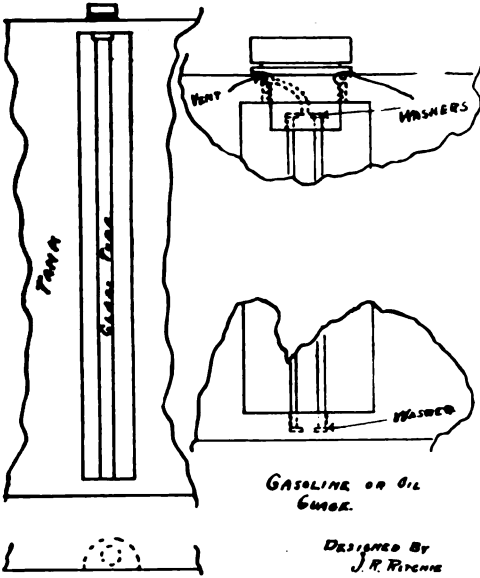
also by diagonal braces. Full lines show wheel off the ground when tire repairs are needed on the road and preserves the front tire from supporting the motorcycle when in the garage. Manufacturing cost small and design is adaptable to any machine. Contributed by Alan C. Cameron, Riverside, Ill.

GASOLINE GAUGE.

5.—Gasoline gauge fitted to tank; glass tube is fitted into a recess in the tank where it

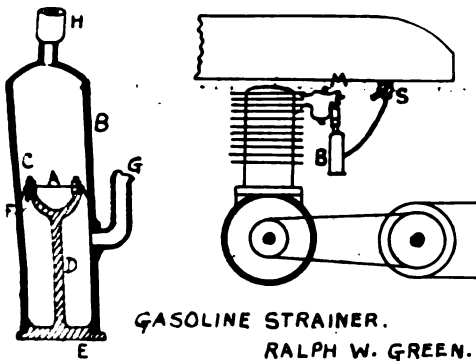
is protected from damage in case of shock. Contributed by J. R. Ritchie, Spokane, Wash.

6.—Front wheel stand contributed by same writer. Fits over axle ends and attaches to mudguard by clip or thumbscrew.



GASOLINE STRAINER.

7.—Gasoline strainer; to be attached directly to carbureter. B is a brass tube, one inch in diameter and 6 to 8 inches long. A is a chamois-skin strainer held to the part D by nuts, etc. The skin is bent downward as at F to prevent leakage past it. G is the connection to the gasoline tank, and H the



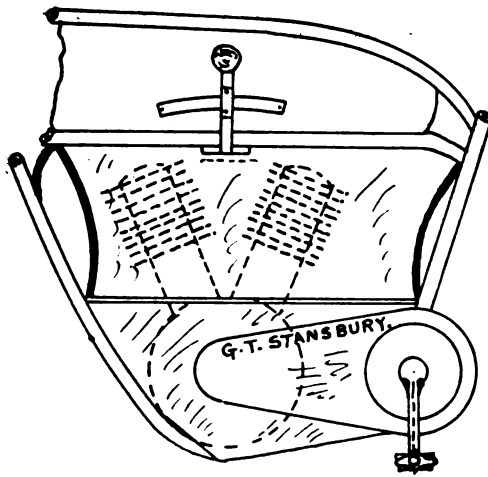
GASOLINE STRAINER.
RALPH W. GREEN.

screwed connection to the carbureter. E is the base cap and is integral with D. The fitting is shown in the main view where M is the carbureter and S the fuel shut-off cock. Contributed by Ralph W. Green, Modesto, Ill.

Green also suggests the employment of Reynolds noiseless chains for transmission instead of the regular roller type. The sprockets in the final drive should be as nearly as possible the same diameters, and the free-engine device should be located in the rear hub.

SHIELD AND DRAUGHT-PRODUCER.

8.—The whole of the motorcycle power-plant is enclosed at the sides by sheet-metal shields, asbestos lined. The ends of the upper sections are flared to allow the air to reach the cylinders, and when riding the air is forced between them, causing a positive draught. The lower sections enclose the crankcase, protecting it from dirt, etc. The shields further protect the rider from oil, etc., and the motor sounds will be slightly



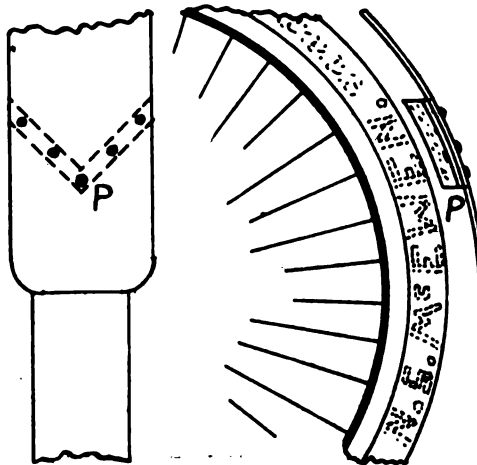
deadened. Estimated manufacturing cost, \$4 to \$5. Contributed by Geo. T. Stansbury, Jr., Cincinnati, Ohio.

VARIETY OF IMPROVEMENTS.

9.—Double stem handlebar fastening in place of the usual method of fastening is suggested as an improvement. Spring seat posts to be extended to include the pedaling gear and pedals, so that the rider would be more comfortable and not have to take the motions through his knees. The ball valve in many oiling devices to prevent sucking back should be replaced by a spring-loaded mushroom valve. The magneto should be mounted on the motor-base, not on anchor plates, as by this method there would be no danger of the magneto gearcase working loose. Bowden wire controls to replace other devices, eliminating loose lugs, easily rusted control rods and brazed lugs. Horizontal bracing for front "dead" forks would be more desirable than the V-shape bracing. Metal tool boxes to be made narrower so as not to weaken the frame. Mufflers to be in rear of motor and not at front. Suggested by Chas. Geasland, Platteville, Wis.

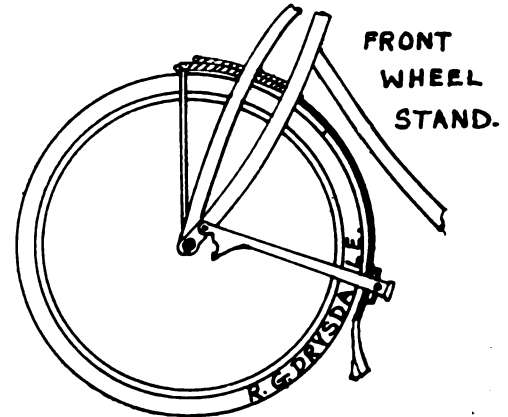
NOVEL MUD-PLOW.

10.—For riding where there is much clay or mud, a plow fitted under the mudguard is suggested. The device is made of two pieces forming an acute angle and projecting within a half inch or slightly closer to the tire. The mud coming against the angle, is thrown clear and permits the wheel to revolve freely. Contributed by Norman S. McEwen, Nashville, Tenn.



FRONT WHEEL STAND.

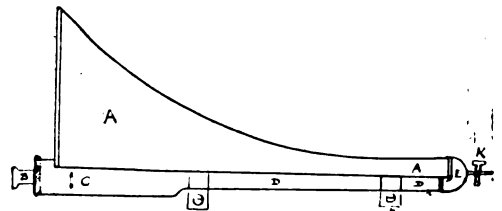
11.—Front wheel stand; fitted in the same manner as the regular rear stand. Drops behind the front wheel and raises the machine when pulled backward. Useful when front tire needs attention and in garage, keeping both tires off the floor. Shoulder on front of leg fits under axle pin when stand is in service. Contributed by Roderick G. Drysdale, Westfield, Mass.



FRONT WHEEL STAND.

SPACE-SAVING HORN.

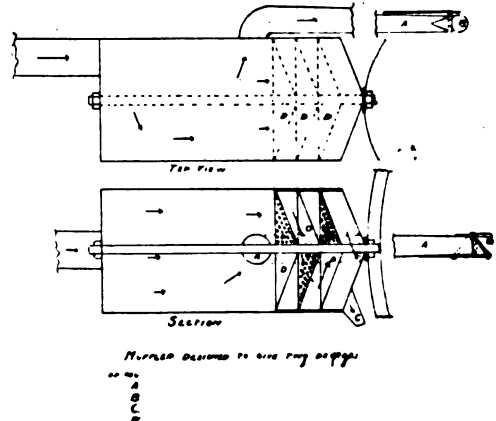
12.—Horn, fitting to top tube or other part of frame. A is the bell, B the plunger, C the plunger-barrel, D the straight and E the



crook. K, K, K are fastening devices. A very novel arrangement. Contributed by Alfred T. Mason, Pittsfield, Mass.

ADJUSTABLE MUFFLER.

13.—Adjustable muffler. Front portion similar to that of regularly fitted mufflers; rear portion fitted with baffle plates adjustable to give two degrees by their position in the muffler cylinder. Contributed by J. A. Ritchie, Spokane, Wash.



FRONT WHEEL STAND.

14.—Front wheel stand adaptable to any machine. Made of flat stock $\frac{3}{4}$ inches wide, and long enough to reach over top of wheel from side to side. Holds in ends fit over fork bolts. Two flat pieces are riveted to the loop to form wide base and keep stand steady. Contributed by Frank E. Waelder, Mannibal, Mo. Not illustrated.

TROXEL SADDLES

would be used exclusively as equipment on all motorcycles if it wasn't for the fact you can buy inferior saddles so cheap.

The poor, unsuspecting rider who takes what he is given is the victim of circumstances.

The temptation to save on equipment plus the agent who forgot to specify—lands you Mr. Rider, on a saddle that does everything "but give satisfaction."

The leather used in the top is one big item to look into. Just look at the under side of the leather top. If the color is reddish, it is Hemlock tanned leather and will not stand abuse—Cheap leather. If the reinforcement is not in the top, "same as all Troxel tops are reinforced," there is another case of cheapening the saddle to make a price so the inferior saddle has a chance to get on a machine.

Look into the saddle construction and remember this.

All Troxel "No Bump" saddles are guaranteed to give satisfaction.

Tops are made of Finest White Oak Tanned leather, reinforced with another white oak tanned lining. That is why Troxel tops stand the abuse of rough riding and also why

Troxel Saddles cost more money.

Riders of a few machines that do not equip Troxel saddles gladly pay more money to get a Troxel saddle on their machines.

Specify the Troxel "No Bump" Saddle and eliminate all future trouble. Supplied as regular equipment on every Motorcycle built almost.

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TROXEL MANUFACTURING COMPANY

ELYRIA, OHIO

H. T. ROBERTS, Selling Agent,

- 538 So. Dearborn Street, Chicago, Ill.

**MOTORCYCLE
ILLUSTRATED**

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J. LEO SAUER,
President

EDITORIAL COMMENT

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THURSDAY
AUGUST 8, 1912

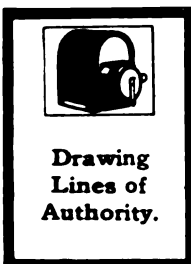
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H. N. CONDUCT,
Secretary



State
Rivalry
Will
Help.

Reference to the revised sections, published elsewhere in this issue of **MOTORCYCLE ILLUSTRATED**, will satisfy the inquirer that the object of the revision is not only to add to the duties and responsibilities of State Commissioners, but also to permit of their exercising more power and practically as much initiative as they desire. Right here is the crux of the change, namely, in that it should be productive of clear-cut and wholesome rivalry between the different State organizations to show, each year, the best results, not only in the way of adding to the membership of the F. A. M., but—and this is of vastly more importance—in the measure of the co-operation given the President, Board of Directors and the National Committees. The latter are especially in need of such assistance, and in position to profit by it to a wonderful extent.



Drawing
Lines of
Authority.

Thus far no National official has shown the slightest disposition to exceed his authority. Just the contrary has been the case and, if the average President, Director or Committee Chairman is open to any criticism, it would be on the score of his having failed to exercise enough authority. And there's a reason, viz., lack of local co-operation. It is this very circumstance which the change in the basic laws of the F. A. M. are intended to improve. It is only natural to suppose that the widening of State opportunities will result in greater State activity. In any event, the new arrangement involved makes clear the old definition of the duties of every

official, from the National chief executive down to the local commissioner in the smallest town in which the F. A. M. has representatives. Furthermore, based upon the Constitution of this country, that of the Federation does away with the possibility of confusion by stating the principle that the State organizations may, within their respective jurisdictions, exercise all powers and assume all the responsibilities which are not expressly delegated to the officers of the National body. The duties of the latter, besides being clearly set forth in the Constitution and By-laws, are also in a large measure established by practice, making it just so much easier to draw the line of demarkation between National and State authority in general and any case in particular.


TWO CADIZ ENTHUSIASTS.

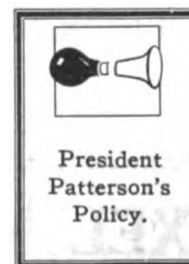
JAMES TAGGART, of Cadiz, Ohio, who appears in the accompanying photograph with his Henderson four and a girl friend, is a full-fledged enthusiast. By way of proving his claims in this direction he states that evening spins of 50 miles with his fair companion are quite common. Four cities, Wheeling, W. Va., Dennison, Urichsville and Steubenville, Ohio, each lies about 25 miles from Cadiz and the pleasure jaunts are usually made to one of these points. Referring to the enthusiasm of his companion Taggart states that she has repeatedly declined invitations to ride in her brother's 40 h. automobile when there was a motorcycle trip in prospect.

M. C. PARRISH, a Merkel rider of Tacoma, Wash., has already ridden his machine 14,000 miles.



Stirring
Up Local
Workers.

The new order of things adds materially to the importance of local commissionerships. In the future, these promise to be more than empty titles. State commissioners, appreciating that they will be held responsible, may be depended upon to make the best possible selections, and they will have less difficulty than heretofore in inducing their appointees to accept office. We confidently look forward to big accomplishments by hundreds of local commissioners each year. They will be better situated for doing things. For the F. A. M. as a body, with the right kind of co-operation on the part of State and local commissioners, will serve its members to such advantage that it will be no great task either to get new members or hold a goodly proportion of the old ones. And by the loyalty of the year or two-old member is the real value of an organization measured. Rendering service such as was out of the question without efficient local help, the National committees and the Touring Bureau will have many an opportunity to demonstrate that the F. A. M. has really something valuable to offer in return for that dollar a year. Not one, but a dozen answers will be ready for the fellow who wants to know what he is to get in exchange for his hundred pennies per annum.



President
Patterson's
Policy.

President Patterson has already made it plain that it is his intention to continue the policies of his predecessors. He announces the appointment of four of the five present committee chairmen, including Dr. Thornley and E. M. Estabrook. The problems of the new Constitution, as well as of the new competition rules, will be worked out by those who favored the changes. It is but fair that they should assume the responsibility.

MATCH RACE CALLED OFF

Cox and Fredericks Will Meet Again Soon
On Denver Bowl to Settle Question
of Supremacy.

DENVER, Col.—The first Sunday races that have been held without the usual rainstorm were staged at the Tuileries Park on July 28, and a large crowd witnessed the sport. Close finishes characterized the events.

The feature race of the afternoon and the event in which the greatest interest centered was a two-mile match race between Jim Cox and "Curly" Fredericks. These riders have been bitter rivals for months and repeated efforts have been made to get them together, without success, until yesterday. Then they made two attempts to settle the question of supremacy, but the ending of each was so unsatisfactory that neither rider was awarded the palm and the race will be run off at the next meet. In the first match race they rode elbow to elbow until the last lap, when Fredericks' machine broke down. The judges, by previous agreement, decided to call it no race and ordered the event run over. After Bowen had defeated Swartz in hard fought match race, Fredericks and Cox again took the track and as in their former race, they battled desperately for one and a half miles and then Cox's machine broke down. In each instance the race belonged to either man up to the time of the breakdown.

The final event on the program was a six-mile open race in which six riders competed. They got off in a bunch and four riders led at different times, but Bowen managed to pull out in front on the home stretch with Swartz and Cox following in the order named. Summaries:

One-mile time trials, professional, 61 class—Ed. Swartz (Indian); time, :43½. L. Bowen (Merkel); time, :43½. Jim Cox (Merkel); time, :41½. Curly Fredericks (Excelsior); time, :40½.

Two-mile match race, professional, 61 class—J. Cox (Merkel), Curly Fredericks (Excelsior); called off in second lap of second mile.

Two-mile match race, professional, 61 class—L. Bowen (Merkel), E. Swartz (Indian). Time, 1:28½.

Two-mile match race, professional, 61 class—Curly Fredericks (Excelsior), Jim Cox (Merkel); called off in second lap of second mile.

Six-mile open professional, 61 class—Bowen (Merkel), Swartz (Indian), Cox (Merkel). Time, 4:25.

ONE of the largest fruit buying firms in Toppenish, Wash., has adopted the motorcycle for making quick trips from the city to the orchards throughout the year.



Officer Harry Smith, of Trenton (N. J.) Police Department.

MOTORCYCLE IN WHITE PLAGUE FIGHT

Wisconsin Anti-Tuberculosis Association Makes Novel Use of Single-Tracker in Rural Campaign—Carries Stereopticon Kit

THE utility of the motorcycle for campaigning and lecture work has been practically demonstrated by the experience of the Wisconsin Anti-Tuberculosis Association, which recently started a field worker on a tour of the state, carrying a stereopticon machine and an exhibit of seventeen charts, together with his own camping kit, on a Harley-Davidson



motorcycle. The machine was donated to the association for this work. At first somewhat an experiment, this venture has proved to be a success. It has special value in this work, as it makes country campaigning practical.

Surveys in Wisconsin and elsewhere have demonstrated, and it is generally recognized by those engaged in combating the disease,

that there is almost as much, if not as much, tuberculosis in the country as in the more congested districts. Because no means formerly tried have made it possible to reach enough people in a day, the educational campaign for the prevention of the disease has not been extended into the rural sections. With the motorcycle, Mr. Werle, who is doing the work in Wisconsin, reaches as many people in a day among the rural population as he would by an ordinary railroad tour.

For illustrating daylight talks, he carries a portable exhibit of seventeen charts. Early in the morning he displays them at a creamery, talking to the farmers bringing in milk. By noon he has gathered an audience in some small town perhaps several miles away. Distances can be covered so rapidly that he gets to another village in time to get a good rest before the stereopticon lecture in the evening.

When the weather permits, even the evening lectures are given out of doors. A McIntosh stereopticon is operated from the luggage carrier of the motorcycle, the light being supplied by the same gas tank that runs the head and tail lamps for night traveling. The pictures are projected against a white curtain which is carried as part of the equipment.

For pleasure as well as economy, Mr. Werle carries in addition to the exhibit and stereopticon machine, a compact camping equipment consisting of a silk lumberman's tent, blankets and a few necessary cooking utensils. With this equipment he is independent of hotels as well as railroad schedules. Only when one considers that one-half of the population of Wisconsin is rural, and greatly in need of education along the line of sanitation, can the significance of this work be appreciated.

JERICHO TURNPIKE OPEN.

AFTER having been closed for nearly two years at points east of Woodbury, the Jericho Turnpike, which is the main highway of the north side of Long Island, was opened on July 12. The State, at a cost of more than \$10,000 a mile, has transformed this famous old country road into an ideal motor-way. The new section is 14 miles long, extending from the Nassau county line to the bridge over the Nissequogue river at Smithtown. Eleven miles are of concrete foundation with tar and gravel coating, and the last three miles are of asphalt-macadam construction.

The Turnpike is reached from New York by way of the Hoffman Boulevard and Hillside avenue. It runs from the village of Queens through Floral Park, East Williston, Jericho, Woodbury and Commack to Smithtown. Beyond Smithtown the country roads are in fair condition, enabling the tourist to reach St. James, Stony Brook, Port Jefferson and other North Shore towns.

There is only one railroad crossing between East Williston and Port Jefferson, a motor run of forty miles through a picturesque wooded country.

TIFFIN, Ohio.—The Police Department of Tiffin has been provided with a motorcycle and Chief Meyers is riding it.

SETTING GOOD EXAMPLE.

AT its last meeting the Maryland M. C., of Baltimore, went on record against the open muffler, tank-riding and unnecessary speeding. The club has agreed to assist the local authorities in enforcing all the traffic regulations.

UNITED STATES government, customs department officials are now using motorcycles in the Port Townsend and Puget Sound districts.



Sturdy van used by the Bicycle and Motorcycle Garage in Alameda, Cal.

BOSTONIAN'S TALE OF FLYING TRIP

Plenty of Road Variety and Some Genuine Thrills Mark 900-Mile Tour Which Traversed Four States in Four Days

By A. W. Devine.

FOR some weeks I had been looking forward to a trip from Boston to Wilkesbarre, Pa., and when my new Excelsior arrived I lost no time in completing my plans for the journey. I decided to take to the road on May 13, and despite the fact that the fateful day proved gloomy and misty I would not tolerate further delay. Accordingly I packed my suitcase, oiled my machine carefully, greased all exposed nickel parts and chugged out of The Hub, prepared for anything that might develop. Shortly after 2 p. m. I rode out of Boston and before I had covered five miles I did not mind the drizzling rain. In fact, I derived a sort of satisfaction from making good progress in such weather.

My trip was without incident through Marlborough, Worcester, Springfield and Hartford, a stop being made at the latter place for gasoline. At this point I figured that my machine had consumed about a gallon of fuel, and I had traveled in the neighborhood of 96 miles. On leaving Hartford it was necessary to cross a sharp bend in the car tracks, and I did not notice how high the rails were until I went down in a heap. Then I had a better



chance to observe them. I should have been warned, by the way, for two years previously I had fallen in exactly the same spot and under the same weather conditions.

Night Stop at Meriden.

I reached Meriden, Conn., at 7:30 p. m. and decided to put up there for the night. I had experienced no machine trouble since starting, but I was a trifle tired and the weather was not inviting for night riding. In the morning I turned out at 6 o'clock and after replacing several nuts which had been lost from my luggage carrier I filled my tanks and got under way again. Out of Meriden I rode in a drizzling rain, but several hours later the sun came out and I made better time. On nearing Portchester I was obliged to ride between car tracks, with the road torn up on my left. Suddenly I came upon a ditch, crosswise in the street and about a foot and a half wide. I could not avoid striking it, but luckily my machine fell across the opening and did not drop into the trench, which was about eight feet deep. The only damage was a dent in my front rim.

Throughout the day I appeared to have a jinx with me. As I was puffing out of Portchester a big automobile came tearing out of a side street and cornered me so that I was obliged to make a sharp turn off the road.

The mudguard of the car struck me, however, bruising my arm and bending one of my pedals back flat against the machine. I made a hurried repair and took to the trail once more.

Over Good Jersey Roads.

I arrived in New York City at 12:30 and rode via Seventh and Fifth avenues to the Twenty-third street ferry, where I embarked for Jersey City. On landing I traveled over a mile of cobblestones, then struck a piece of boulevard and finally ran into more cobblestones. This was poor going, but after passing through Newark I had a good macadam road all the way to South Orange. There I struck the "Seven Bridge Road" and my troubles were over for a time. The roads were fine through Chatham, Madison, Morristown, Wendham, Chester and German Valley. Between the latter place and Hackettstown I had a hard mountain to climb but I went up without difficulty. This grade has a sharp U turn which caused me to slow down to seven miles an hour. However, I stuck to my saddle.

From Hackettstown I had good roads to Delaware and Myer's Ferry, but from this point the route was rough and sprinkled with large stones to within a few miles of Delaware Water Gap where there was easy going again. I passed through the Gap without stopping and rode on to Stroudsburg where I put up for the night. Just before reaching Stroudsburg I had a bad fall while taking a corner too fast. My brake seized when I applied it and when I awoke I found myself cut and bruised in a dozen places. I also came out of the spill with a sprained ankle. I met two automobile parties at the hotel in Stroudsburg and managed to forget my troubles while we compared notes on the roads we had traversed.

Riding Under Difficulties.

On Saturday morning I turned out at 6 o'clock and found that my ankle had swollen until I could hardly walk. By lacing my shoe tightly I was able to make a start and at 9:30 I pulled out of Stroudsburg. I had 20 miles of rocky roads to Pocono Summit, but from this point I found 16 miles of good slate road to Tobyhanna and Blakeslee. From Blakeslee to Bear Creek the roads were in wretched shape, but the last ten miles before reaching Wilkesbarre was much better. I arrived in Wilkesbarre at 12:30 and spent the afternoon in riding around through the neighboring towns. I found the scenery very pleasing but on Sunday morning I was glad to start on the return trip to Boston. I went back over the same route and when I pulled into Norwalk, Conn., that evening at 7:30 I was mighty tired.

During the day I had ridden through four states and over rougher roads than I had ever traveled before, for after riding on Massachusetts highways the roads of Pennsylvania gave me a rude shock. On the following morning I dropped in to see Stanley Kellogg at Bridgeport, and then rode on to Springfield, where I arrived at 2 p. m. From this point I made the final sprint into Boston in a little less than three hours; it was a jump of 97 miles. I had been four days on the road and had covered 900 miles so that I could find no room to complain as to the outcome of my outing.

RIDING AROUND THE WORLD

Greek Motorcyclist Starts on Tour with Which He Hopes to Establish a Record.

AUGUST KIAKAKAROS, a native of Karintine, Greece, who has been in this country for two or three years, started recent-



ly on what he hopes to make the longest motorcycle trip on record. Kiakakaros, who has been living in Springfield, O., for some time past, will make a leisurely tour around the world, combining pleasure and business. He received word a few weeks ago from the old country that he had fallen heir to a large estate which will make him independent for the remainder of his life. His one ambition has been to see the world, and the motorcycle is his choice of a vehicle.

Kiakakaros purchased from Henry Hornberger, Springfield agent for the Flying Merkel, a 4 h. belt-drive Merkel machine on which he will make the trip. He spent a week at the Flying Merkel factory at Middletown, Ohio, making preparations for his long journey and is now riding eastward. His route will take him to Dayton, Columbus, Cleveland, Erie, Buffalo, Albany, Poughkeepsie and New York City, and after arriving in New York he is undecided whether he will take a steamer direct to Europe or start back across the country, taking the steamer from San Francisco to Japan.

In addition to making the trip for recreation, Kiakakaros will endeavor to raise funds from his countrymen for the purchase of motorcycles to be used in the standing army of Greece. A fund has just been raised by wealthy Greeks in this country to purchase aeroplanes for the Greek army, and Kiakakaros will undertake the job of supplying the army with motorcycles.



A novel trailer used for quick deliveries by an ice cream company in El Reno, Okla.

ENGLISH NOTES

BY BRITISHER

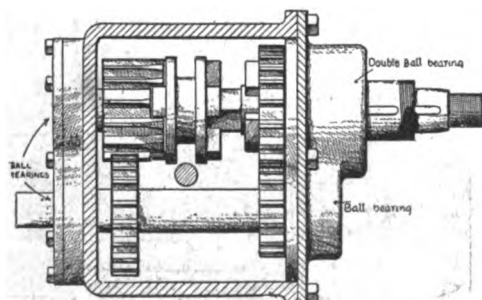
T. T. Race Assured for 1913—Obstacles Overcome by Riders in Scottish Trials—
Pointers on a British Spring Frame and the Matchless Six-Speed
Gear—A Special Lady's Machine.

THE Auto-Cycle Union has sized up its racing accounts for 1912 in a big hurry, and ascertained the loss, which fortunately is not extensive. As a consequence the secretary announces that a race will definitely be organized for 1913, whether the Manufacturers' Association signs an abstinence bond or not. This is healthy independence. A committee will start work upon the new conditions immediately after the August vacation, and the rules will be out in plenty of time for foreign competitors to get some genuine ginger engines through. We hope to welcome a really formidable American team.

Scottish Endurance Trial.

MUCH interest was aroused in the annual six days' trial of the Scottish Club, which ever since its inception has been so violent in character that a timorous trade has done its best to boycott it. In the badness of the roads it traverses, it probably presents close resemblance to an American trial, for hundreds of miles are over moorland sheep tracks, conducting the riders across country from one range of hills to another, in the effort to find steep precipices to climb. In the 1910 trial there were two hills of which no machine entered could make a clean ascent, and this year beats all records. The worst hills were as follows:

Amulree, a two-mile ascent, of a boulder-strewn, grass-grown character, beginning with a right angle turn over a humpbridge,

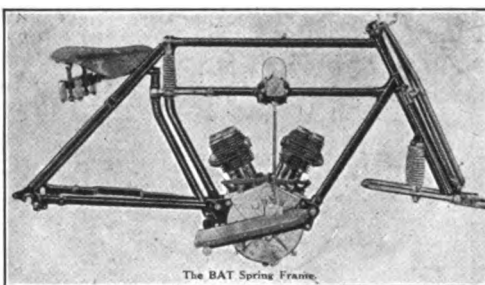


The BAT Two-Speed Gear.

continuing with half a dozen "steps" of 20 per cent. grade, culminating in a double V bend, the twists being within 10 yards of each other along a track 5 feet wide, with inside grades of 33 per cent. and grades of 25 per cent. measured in the center of the alleged "road," concluding with 200 yards of 16 per cent. grade. Only a trick rider on an immensely powerful machine

could be expected to climb this first shot.

Rest and Be Thankful, a four-mile climb of a long steep gorge between two ranges; the grade is nowhere worse than 12 per cent., but the gorge forms a funnel down which a gale is permanently raging, and good engines have a way of growing tired



ere the summit; just at the top there is a wicked V corner, on which the wind hits you fair and square, holds you up, and upsets your mixture.

Cairnwell Summit, the highest road in Great Britain, starts with a mile of 10 per cent. on a narrow sludgy track, usually very rutty and heavy going; halfway up comes a double Devil's Elbow—most men hit the bank at the second twist—above this, a mile of 10 per cent. gradient, and more than a capful of wind. As you cross the plateau, you see deep snow lying far below, even in August, and as you drop down in the far valley, there is a piece where you feel like having two fellows to hang on to the tail of your machine; no car has ever climbed up here, and there is a ravine and skewbridge waiting for the unfortunate whose brakes slip.

Cairn o' Mount, two miles of straight heavenward travel on a wicked gradient. Halfway up the road crosses a sandhole, into which the foundations are always falling. This patch is always refilled with soft rubbish once a fortnight or so, when the road is open in summer; as you tear up the hill, you sink in it up to the hubs, and have to push past—lots of men waiting to earn a dollar helping you; when you are past it, the bother is to get restarted; at the top there is a double Devil's Elbow.

Gruinard, a wicked little climb by the beech of a bay at the other end of nowhere; you see it coming just in time, and accelerate to hit three feet of drift sand at the crook of the bay; out of the sand the grade begins, and starts round a double V bridge; when you can beat the bridge

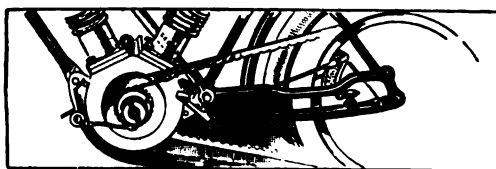
you sail up nicely to a blind corner; the blind corner opens into a crack in the rock-wall, right angles, through which the gale hits you kerflop.

Poolewe, one of those sneaky hills which look like level, but is really 1 in 6; a narrow road climbs up between steep walls of rock—always looks as if it were finishing, but never does; takes the crack men unawares, and fetches them out of the saddle like greenhorns in a steeplechase.

To really enjoy these hills you should try them in wet weather, when you learn something about beltsip, and in the Highlands it's always raining, except when it snows.

Some Cute Tips in My Outfit.

MY outfit for this run cost me some thought, and one or two of the tips are worth a comp's time. The first was the necessity of lubricating my three-speed hub with very special oil every 100 miles, and the absence of any container for such oil. I got a little leather holster, designed to store half a pound of carbide, emptied the carbide out of the inside tin, swilled it dustless with gasoline, poured in the oil, hammered down the press-on lid, and there I was. Next found the pannier toolbags on my carrier were only large enough to hold the main tool kit, spare plugs, valves and three-speed gear replacement set. Went to a cycling store and got two small tool bags, price 30 cents each. Put tire repair kit, gaiter and one-minute levers in one



Matchless Rear Wheel Adjustment.

bag, belt repair kit in the other (spare fasteners, punch, knife, screw-drivers and bolts/panner), strapped both wallets to handlebar. Found my spare tube case was lost, stolen or strayed. Furled spare tube round handlebar, securing by looping tab of butt over tire valve. All serene then.

Three-Speed Hubs Under Racing Test.

IHAD an interesting experience last week. I was in the running-shed of one of our premier factories, when the race-crates came in as returned from the T. T. races in the Isle of Man. "Say, old man," quoth I to the chief, "let's see the inside

of those jiggers?' We stripped the crate off one machine which had finished very high up, and I started with the hub. Mind you, this three-speed hub weighs no more than 10 pounds and is only 5 inches in external diameter; against this, it had been used very recklessly in the race; whenever the rider approached a bad corner he kept on full throttle till the last moment of safety, then smashed in second gear and clapped on both brakes; rounding the corner, he accelerated like a skyrocket on second gear, and then shoved in top gear with his knee, never lifting the valve or de clutching. Well, the gear was perfect—the toolmarks were as if it had never been



Midget Bi-car, an English model designed especially for women riders.

used at all. Then we turned to the engine. The big-end bearings were a trifle worn; the wristpin was perfect; the cams were unworn; the ballbearings of the crankshaft were perfect; the combustion chamber was heavily carbonized, and the exhaust valve seating would have been non est in another hundred miles, for a sixty-pound spring had been used on a "ring-valve," i. e., a valve of nickel steel with a recessed face, into which a ring of a secret alloy is spun by a secret process, to provide the actual working face. "Put a fresh cylinder on that engine, Jim, before she goes out," said the chief laconically, and that is all there was to it. But the condition of that light, compact little hub-gear was a revelation.

A British Spring Frame.

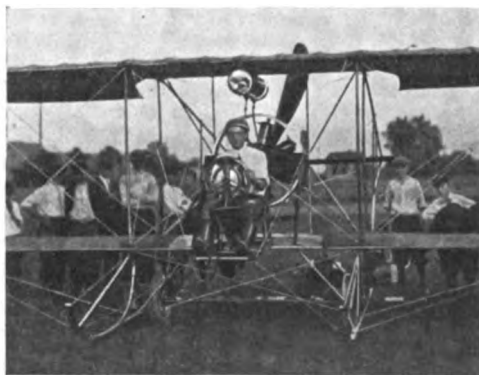
I SUBMIT a cut of the only spring frame which has ever made good on the British market; it is fitted to a machine named the Bat (best after test), which has utilized this frame ever since 1903, and experience has been unable to improve it. It will be seen that the front forks are hung on spring levers of a type giving rather longer leverage than is obtainable by concentrating springs at the hub, and that the saddle pillar and footboards are also slung on springs. The one drawback to the design is that it is not suited to very tall riders, as the saddle is nonadjustable and set close to the footboards. The special magneto drive will be noticed. It was introduced before the days of waterproof magnetos, and designed to permit of carrying the magneto inside the tank and out of reach of wet and dirt. This frame gives very silky riding. I also append cut of the gearbox attached to these machines, which is an excellent example of the countershaft gears which are slowly carrying all before them in Great Britain.

The Collier Bros.' Six-Speed Gear.

I APPEND herewith detailed drawings of the gear with which the famous Collier Brothers win road races. They started designing with two main factors in view. The first was that an ordinary two-speed gear was a handicap in road racing, because the gap between the ratios meant an unnecessary sacrifice of speed whenever gear changes were necessary. The second was that a horizontal or lateral motion of the gear control was dangerous at high speeds. Consequently their plans took the line of 1, a to and fro control, for safety at speed; 2, an expanding and contracting engine pulley, to afford short step gear ratios; 3, a movable back wheel, to take up belt slack. This practical headwork is characteristic of all the Colliers do. One sketch shows how the back wheel is movable by duplex chainstays acting on a lazy tongs principle; though the sketch does not show the point, there is an extra two inches of movement over and above what is required to suit the belt tension to any given pulley diameter; this enables the Colliers to tighten the belt in a race, if it stretches, without dismounting to cut it. Notice the cleverness and simplicity of the notion by which the angular motion of the pulley lever is converted into circular motion on the pulley itself, by means of a short bit of chain working over sprocket teeth cut on the pulley sleeve. The cuts of the internal pulley and sleeve cams show how the pulley is contracted and expanded; notice that the pulley barrel contains double thrust bearings, so that there is no end thrust on the engine itself.

A Special Lady's Machine.

ENGLISH girls, with few exceptions, are not partial to astride riding, and the Midget Bi-car is a good illustration of a machine designed especially for skirt-riding. Finding that the standard tubular open ladies' frame shows a tendency to whip and buckle, the inventor designed a novel frame of hollow steel girders, with spring-slip engine shields, enclosing cylinder and belt after the fashion of the bonnet on a high-grade automobile.



VALIANT AS A FLYER.

MANY motorcyclists will no doubt be surprised to learn that Frank Libbey Valiant, assistant sales manager at the big Merkel plant in Middletown, Ohio., was at one time a bidder for aeroplaning honors, but it is a fact that Val even went so far as to make two successful flights. About that time he decided that selling motorcycles was a far safer occupation and just

about as pleasant as flying, and he turned away from the sky machine to one that is credited with being "the next thing to flying." However, when one of Val's friends arrived in Middletown recently with his biplane the Merkel booster couldn't resist the temptation to snuggle down behind the wheel once more, and before anything more serious had happened, the accompanying photograph was snapped.

OUTING ON STATEN ISLAND.

ONE of the recent outings of the Bay Ridge M. C., of Brooklyn, N. Y., was to Kreischerville, Staten Island. About twenty members and their friends made the trip, which proved so successful that a number of other Sunday runs are being planned.



O. P. Warlick, M. M. Aiken and L. N. Vine, of Brooklyn, N. Y., on recent Sunday trip to Budd's Lake, N. J.

BACK FROM LONG TOUR.

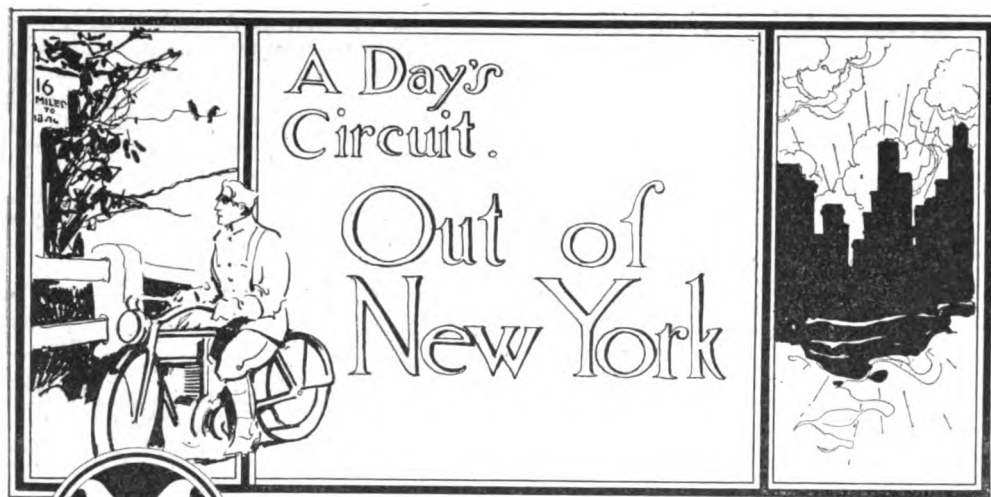
MINNEAPOLIS, Minn.—Guy Webb, of the Arcade Cycle Exchange, of this city, returned recently from an Eastern trip of 2,123 miles which he covered on his Harley-Davidson. On returning to Minneapolis from Columbus, Ohio, where he stopped off to attend the annual F. A. M. meet, Webb met with some adventures. In a suburb of Chicago he was arrested and fined \$15 for speeding with another rider. He declares that excepting for some muddy roads near DeKalb, Ill., the highways were in fine condition. To avoid the hills near Dubuque, Webb took a straight course to Minneapolis by way of Sterling, Joliet and Cedar Rapids, Iowa.

GOING AROUND THE WORLD.

MINNEAPOLIS, Minn.—Harry Humphries, well known as a Marathon runner, left last week for a trip around the world on his two-speed Minneapolis motorcycle, accompanied by his wife on a tandem attachment. Humphries will travel to Vancouver and then to St. John, N. B., from where he will take the steamer for Southampton for a trip through the British Isles and from there on across the continent.

THE GOODYEAR BULLETIN.

THE special F. A. M. issue of the *Goodyear Tire Bulletin*, now being distributed, contains much matter of interest for the enthusiast who attended the convention as well as for the rider who could not find time for the trip to Columbus. A number of good photographs help to brighten the pages.



MOTORCYCLISTS throughout the metropolitan district are so well acquainted with Long Island roads that

little need be said as to the inducements they hold forth, but detailed information is not always at hand for the rider who plans a day's outing, and in such an emergency the following outline will meet all requirements. This route provides for only about 70 miles of actual riding, but there is an hour's journey by ferry included in it, so that in point of time the trip is as long as if 90 miles of road were covered. Incidentally the boat ride is one of the most pleasant features of the trip.

Where formerly Jackson avenue, leading out of Long Island City, was in such bad condition that it was omitted from most touring routes, now it is so fine throughout most of its length that it invites the motorist to set forth on it. The tour given here starts from New York City by way of the Queensboro Bridge. When the motorcyclist gets to the Queens end of that structure, instead of going ahead on Thompson avenue he is directed to swing left and take the fine asphalted surface of Jackson avenue.

Save for a bit in the neighborhood of the car barns, this road is delightful now, although the scenery along it is not exceptional. Once across Flushing Bay, however, there is something worth while. The route runs into Flushing, a beautiful old town. Just now, with trees in full leaf, arching over smooth streets, Flushing makes a pretty picture.

Broadway is the road that is taken now. Winding along the smooth surface invites speed that it is best not to attain. To those who enjoy touring only where the road conditions are best this is a section of the journey that will appeal. It is smooth going, along a fine type of country road all the way to Roslyn and down to Sea Cliff. The latter part of this journey lies along the shore of Hempstead Harbor and it is very pleasing to run along a finely oiled road, with the water on the one hand and the hills on the other.

Sea Cliff is about 25 miles out from the city and here the ferry may be taken over to Rye Beach, bringing the rider back into New York by way of Westchester County. The ferry runs from the Long Island side on the odd hours, so that if it isn't caught at 3 o'clock, for instance, the tourist will

have to wait until 5 o'clock for his next boat.

The sail across the Sound with a view back to fine estates in the neighborhood of Sea Cliff and ahead to the shores of Westchester, is an agreeable interlude in the motor trip. The boat takes about five minutes short of an hour for the journey.

Arrived on the other side the motorcyclist is at Rye Beach, where if there is no great hurry and the day is fine a swim or lunch may be in order. If no stay is to be made the tourist may take the clearly marked road back to the Boston Post road. Touring conditions here are not so good, but it is possible to find a couple of detours. Instead of swinging to the left when the Post road is reached the tourists should bear to the right and then turn left into Rye Beach avenue. Following this for perhaps half a mile a sharp left turn is to be made in front of a small house, into what is known as Keeler avenue.

This followed for a time becomes Harrison avenue and runs down into the Post road, avoiding most of the bad going between Rye and Mamaroneck. It is not possible to skip it all, so that the trolley tracks will be encountered for a part of the way in. Beyond where the trolleys turn off for Glen Island, at New Rochelle, a right turn up the hill leads over to the Mount Tom road, a private, smooth way that parallels the Post road and brings the tourists out after a left turn is made at the entrance to Travers Island. From here into New York the road is about all that could be desired.

It is possible also to strike off on Rye Beach avenue toward White Plains, if there is any desire to return to New York through that place. Road conditions up that way are better than they have been, so the rider may make this trip without fear of encountering going that is really bad.

The country covered by this tour is marked by a high average of good roads by views that are worth seeing.

RECRUITING FAIR RIDERS.

THE gentler sex in Coffeyville have taken to the two-wheeler like a duck to water. The dressmakers of that city have had more orders for divided skirts within the last three months than they have had in the 41 years in which Coffeyville has been on the map. This may sound queer, but it is a fact, and it is not an uncommon sight to see ten or fifteen motorcyclists on the streets every night with a lady tandem rider.

ON WANDAMERE BOWL

Brodbeck Enters Protest After Defeat by Bernstrom—Ward Matched with Whittler.

SALT LAKE CITY, July 24.—The Pioneer races at the Wandamere bowl were well attended and the meet was run off in good form. Al Ward and Fred Whittler were scheduled for a match race, but owing to a delay by the express company Ward's machine did not arrive from Columbus in time to allow him to compete. Ward was at the track.

The point race between Brodbeck, Bernstrom and McNeil was a battle from start to finish between Brodbeck and Bernstrom. The latter won all three heats and evidently Brodbeck was somewhat "peevish," for he at once protested Bernstrom's machine. Bernstrom did not care to have them know how he was getting his speed, so he disappeared and his machine was not measured.

Whittler tried to break Ray Seymour's four-mile track record made in competition. He rode against time and only equaled Seymour's mark, making the four miles in 2.51.

A TWO-DAY PROGRAM.

DES MOINES, Ia.—Exciting motorcycle races marked the two days' program held at Boone, Ia., July 30 and 31. Ralph Bates, the crack rider from Omaha, Neb., captured a majority of the events on an Excelsior. He was hard pushed by H. F. Younkens, of Cedar Rapids, on an Indian.

Two slight accidents marred the cards. On Tuesday "Bill" Austin, of Des Moines, riding a Harley-Davidson, had his machine skid and he was thrown under a standing auto. He sustained slight bruises. On Wednesday Younkens was more seriously injured while riding a match race with Ralph Bates. Younkens' machine skidded on a treacherous turn, and he was thrown. He sustained a broken leg and serious bruises. The race was called off.

FORT WAYNE RACE MEET.

IT is not often that a hundred-mile event is scheduled for a meet, but the Interstate Racing Association included one such in their August 4 program at Fort Wayne, Ind. The event was won by Tullis, Thor IV. Bomarck, Excelsior, hit the fence and retired, but made the round of the mile dirt track in 0:53. Four events only were run off. The summaries:

Five-mile pro., 30.50 limit—Won by Willis (Indian); second, Matthews (Thor); third, Bomarck (Excelsior). Time, 5:01½.

Ten-mile, 30.50 class—Won by Willis; second, Oberwegner; third, Tullis.

Ten-mile pro., 61 limit—Won by Matthews; second, Willis; third, Bomarck. Time, 10:35½.

One-hundred mile pro., open—Won by Tullis; second, Willis; third, Matthews. Bomarck out.

REWARD FOR TOPEKA COP.

POLICEMAN L. J. WONDERLY, of Topeka, Kan., is the recipient of the seventh reward of \$25 paid by the F. A. M. for the return of a machine stolen from a member. Wonderly recovered a motorcycle belonging to Dr. C. M. Hensley, of Topeka, which was taken on June 16 last. A man named Hogan was found guilty of the theft and sentenced to a year in jail.

PLANS have been completed for a race meet to be staged on the half-mile track at Mt. Vernon, Ind., on August 25,

F. A. M. GAINS BY STATES.

NATIONAL SECRETARY GIBSON has prepared the following table to show F. A. M. gains by States for the month of July:

Maine, affiliated, 0; unaffiliated, 1; renewals, 1; New Hampshire, affiliated, 0; unaffiliated, 0; renewals, 1; Massachusetts, affiliated, 15; unaffiliated, 12; renewals, 21; Rhode Island, affiliated, 2; unaffiliated, 4; renewals, 0; Connecticut, affiliated, 0; unaffiliated, 4; renewals, 2; New York, affiliated, 27; unaffiliated, 38; renewals, 41; New Jersey, affiliated, 10; unaffiliated, 5; renewals, 5; Pennsylvania, affiliated, 65; unaffiliated, 37; renewals, 51; Maryland, affiliated, 4; unaffiliated, 2; renewals, 8; Virginia, affiliated, 10; unaffiliated, 0; renewals, 118; unaffiliated, 97; renewals, 80; Indiana, 7; renewals, 2; District of Columbia, affiliated, 6; unaffiliated, 1; renewals, 1; South Carolina, affiliated, 2; unaffiliated, 2; renewals, 0; Tennessee, affiliated, 0; unaffiliated, 0; renewals, 1; Georgia, affiliated, 6; unaffiliated, 2; renewals, 1; Alabama, affiliated, 4; unaffiliated, 0; renewals, 0; Florida, affiliated, 7; unaffiliated, 3; renewals, 9; Texas, affiliated, 0; unaffiliated, 2; renewals, 2; Kentucky, affiliated, 4; unaffiliated, 0; renewals, 5; Oklahoma, affiliated, 2; unaffiliated, 1; renewals, 0; Ohio, affiliated, 118; unaffiliated, 87; renewals, 80; Indiana, affiliated, 62; unaffiliated, 26; renewals, 27; Illinois, affiliated, 34; unaffiliated, 35; renewals, 33; Missouri, affiliated, 0; unaffiliated, 0; renewals, 4; Wisconsin, affiliated, 14; unaffiliated, 13; renewals, 13; Michigan, affiliated, 22; unaffiliated, 12; renewals, 4; Minnesota, affiliated, 0; unaffiliated, 1; renewals, 4; South Dakota, affiliated, 1; unaffiliated, 0; renewals, 3; Nebraska, affiliated, 6; unaffiliated, 1; renewals, 1; Kansas, affiliated, 60; unaffiliated, 16; renewals, 10; Iowa, affiliated, 1; unaffiliated, 2; renewals, 8; California, affiliated, 39; unaffiliated, 4; renewals, 12; Utah, affiliated, 0; unaffiliated, 4; renewals, 4; Colorado, affiliated, 0; unaffiliated, 3; renewals, 5; New Mexico, affiliated, 0; unaffiliated, 1; renewals, 0; Arizona, affiliated, 0; unaffiliated, 0; renewals, 2; Montana, affiliated, 1; unaffiliated, 0; renewals, 0; Idaho, affiliated, 0; unaffiliated,

1; renewals, 0; Oregon, affiliated, 18; unaffiliated, 0; renewals, 5; Washington, affiliated, 17; unaffiliated, 0; renewals, 7; Philippine Islands, affiliated, 10; unaffiliated, 0; renewals, 0; Panama, affiliated, 1; unaffiliated, 0; renewals, 0; Canada, affiliated, 22; unaffiliated, 1; renewals, 0; England, affiliated, 0; unaffiliated, 0; renewals, 7. Totals, affiliated, 601; unaffiliated, 338; renewals, 393.

LIVELY CANADIAN SALES.

H. W. KIPP, the Canadian representative of the Hendee firm, is on an extensive tour of the Eastern provinces in Canada, where he has met instant success in securing orders for the Indian mount. On August 1 he had sold 300 machines on the trip, two carload lots being among the orders obtained. Bowman Brothers, Saskatoon, and R. Williams, Edmonton, both contracted for fifty machines for immediate delivery. Kipp is winding up his tour on the Pacific coast.

Cruickshank, the Winnipeg Indian agent, had sold, on August 1, no less than 124 machines this year to the local trade, whereas his total sales last year were only thirty. F. H. Lemon & Company, the Toronto Indian distributors, had disposed of 173 motorcycles by the same date to the city and Province trade, mostly the former.

SWELLING TWO FUNDS.

A DONATION fund for the widow of the late Bob Hunter, professional performer on the Cleveland Motordrome, has been sent out by the Cleveland M. C., and to date nearly \$300 has been collected. A check for \$5 from the Cleveland M. C. has also been sent to the Jake De Rosier fund.

A MUNICIPAL GARAGE.

COLUMBUS, Ohio.—The contract has been awarded for the erection of a municipal garage in which will be housed the motorcycles and automobiles attached to the police department of Columbus.

THE Leavenworth (Kan.) Motorcycle Club's first run this summer was to St. Joseph, Mo., a distance of 120 miles.

TO SEAL ALL CUT-OUTS.

COLUMBUS, Ohio, August 2.—Chief of Police Charles Carter is preparing a sweeping campaign for the sealing of all motorcycle and automobile mufflers on machines operated in this city. The chief has



Columbus Mayor Who Favors Radical Muffler Ordinance to Silence the Cut-out Fiends.

the measure already framed and will present it to the City Council when it convenes the latter part of this month. By this move Chief Carter hopes to get a "strangle-hold" on those motorists who are making life miserable for the city folk.

"My views on the subject of compelling the sealing of all mufflers on machines operated in the city are very decided," Chief Carter said in an interview. "For a long time the people of the city have been annoyed by those motorists who delight in speeding about the city streets and getting all the noise possible from their machines. This noise must stop, and I think my measure will be the means of putting an end to it."

A RESOURCEFUL M. D.

IN order to live at his summer home in one part of Minnesota and still visit his patients in another part of the State, Dr. J. J. Ratcliffe has adopted the motorcycle to carry him back and forth.

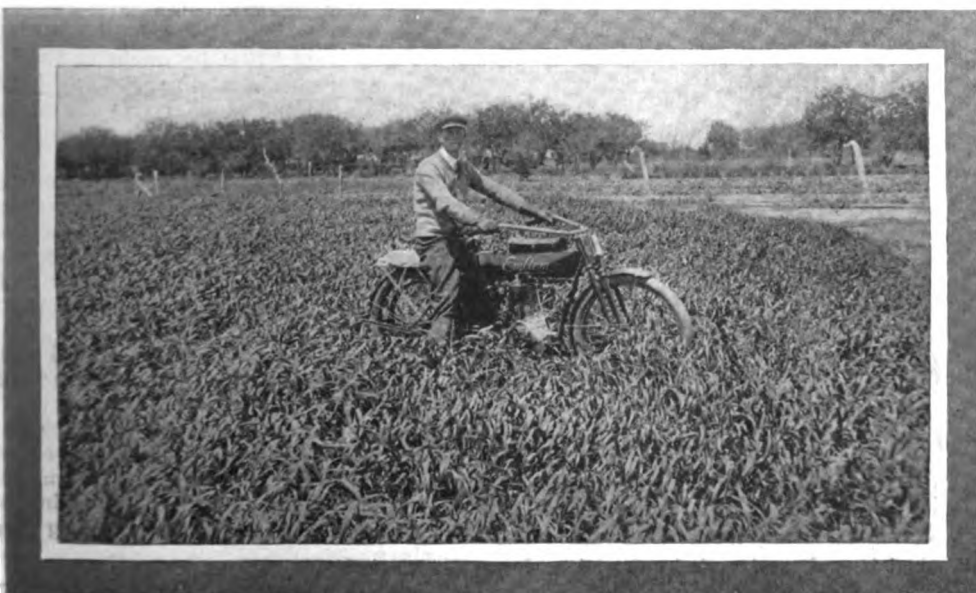
THESE RIDERS WERE FANS.

AFTER several score of motorcyclists arrived at Lawrence, Kan., recently on a recreation spin, two baseball teams were picked from among the riders and a fast game of ball was played.

AMATEURS IN GOOD FORM.

SAN DIEGO, Cal.—Great interests was shown in the motorcycle races on the Sweetwater flat dirt track at National City on July 22. Five thousand persons applauded the plucky riders, all amateurs of San Diego.

ONE of the features at the State Fair to be held at Syracuse, N. Y., will be a motorcycle race on September 14.



Robert Rucker, Emblem Agent in O'Keene, Okla., making a short cut through a field.

AMONG THE CLUBS

BIG MOTORCYCLE PROGRAM

Nearly Two Thousand Riders Attend Annual Outing of California Clubs at Livermore.

OAKLAND, Cal.—The members of the Oakland M. C. co-operated with the clubs at San Francisco, Sacramento, Stockton, Santa Rosa, Napa, Vallejo, San Jose, Santa Cruz and neighboring places in presenting the program for "Motorcycle Day," which was observed at Livermore on August 4. Nearly 2,000 motorcycles were at the scene of the celebration, about 500 more than participated in a similar program last year. There were games of all kinds, road races for both single and twin machines, baseball games, dancing and a fine dinner. Prizes were awarded the winners in the various events and the program throughout was handled on a large scale.

Incidentally the Oakland club made arrangements to have motion pictures taken of its members on the road and of the big gathering of riders during the games and races at Livermore. The program was looked upon as the most successful of its kind ever held in the State.

PLAN MONTREAL CLUB.

FINDING that bicycling is "still going back" in Montreal, Can., Louis Rubenstein, one of the boosters of the city, is working for the organization of a motorcycle club. It is the intention to affiliate with the Canadian Motorcyclists' Association.

A CALIFORNIA OUTING.

MEMBERS of the Long Beach (Cal.) M. C. enjoyed a run to Eagle Rock canyon on Sunday, July 21, a distance of 35 miles. A halt was made for dinner at the canyon, the refreshments being served at the expense of the local motorcycle dealers.

HENRY SEIB acted as secretary of the New Jersey Motorcycle Club, of Newark, N. J., during the absence of Secretary Elmer Crosbie, who attended the Columbus convention.

THE Plainfield (N. J.) M. C. made a run to Lambertville on Sunday, July 28. Seven riders started and five completed the trip.

MEMBERS of the Jacksonville (Fla.) M. C. recently enjoyed a smoker and entertainment program at the home of O. L. Vordermark, one of the club boosters.

FLOYD W. BAUM, captain of the motorcycle club at the University of Illinois, is on his way around the world.

HELD RUN IN RAIN.

CHICAGO, Ill.—The Englewood Motorcycle Club held its second run in the quarterly trials on Sunday, July 28, to Rensselaer, Ind., and return, a distance of 170 miles. There were 30 entries, but it rained the greater part of Saturday night and there were but 13 starters, who left in a down-pour. The rain continued most of the morning, leaving the roads in very bad condition. Only eight of the riders finished. Their scores were as follows:

R. McLaughlin, Harley-Davidson 7, 1,000; Peter Thom, Harley-Davidson 7, 1,000; Wm. Foster, Indian 7; 7,000; Harry Parker, Excelsior 7, 1,000; Gale Smart, Thor 4, 1,000; R. P. Miller, Excelsior 7, 1,000; Oscar Harris, Harley-Davidson 7, 978; Ed. La Violette, Harley-Davidson 4, 934.



Twelve-year-old rider of Richmond, Cal., and the novel machine on which he attended a recent meet of the Oakland M. C.

NOT AFRAID OF WATER.

FLOODED streams between Saginaw and Bay City, Mich., failed to impede the progress of thirty enthusiastic motorcyclists who recently made the journey between the two cities during "high water."

PLANNING BIG PROGRAM.

THE Chicago M. C. is now making arrangements to hold a club race meet and barbecue at the Riverview Motordrome, which will be one of the largest club events of the year.

NORFOLK CLUB ON RUN.

NINE members of the Twin City Motorcycle Club, of Norfolk, Va., recently made a Sunday run to Fentress, a hamlet about 14 miles out of Berkeley. Owing to the fact that the Deep Creek turnpike had been heavily oiled a few days before, plans for a run from Norfolk to Portsmouth, cutting across from Great Bridge to the Deep Creek road, were abandoned.

MOTORISTS ON THE JUMP

Cleveland Starts Traffic Improvement Campaign on a Sweeping Scale—Louie Mueller a Victim.

SEVERAL hundred owners of motorcycles and automobiles in Cleveland, Ohio, were arrested in one week recently for various infractions of the traffic ordinance. Heretofore the traffic regulations have received scant attention, but the police department has now gone to the other extreme and many motorists have been "jugged" for what appear to be trivial reasons. Speed traps have been set in dozens of places about the city and the fines are swelling the municipal coffers.

L. J. Mueller, Indian agent in Cleveland, was one of the victims. Louie, as he is popularly known, was smoking a cigar as he mounted his machine and prepared to get under way with his tri-car. As he kicked up his stand, started his motor and opened the throttle Mueller was approached by a policeman who shouted: "Hey, you're smoking!"

"I know it," replied the imperturbable Louie, "what about it? Can't a man smoke a cigar without having the police department butt in on him?"

"He can smoke a cigar," explained the officer, "but there's a law against smoking a motor, and you're under arrest."

At this juncture it dawned upon Mueller that the officer was referring to his exhaust, and he was obliged to go to police headquarters and convince the judge that a certain amount of smoke was justifiable in starting a motorcycle. He explained that he has been handling motorcycles for ten years and argued that he ought to know a "thing or two about them." The judge thought so too and Mueller was discharged.

Many others, however, were not as lucky as Louie. So many charges have been framed that it is difficult for either a motorcyclist or an automobilist to drive through the city without violating some provision. Arrests have been made for speeding, smoking of motors, passing a trolley while it is unloading passengers, cutting corners, stopping on the wrong side of the street, carrying girls on motorcycles after 6 p. m., using muffler cut-outs, standing machines near fire plugs, improper placing of license numbers and several other reasons. As the present campaign is considered unreasonable the Cleveland M. C. and the Cleveland Automobile Club are taking up the situation with a view to protecting their members.

OWING to heavy rains the Rockford (Ill.) M. C. postponed its endurance run scheduled for July 21.

VISITED
POPE PLANT.

WILLIAM WARD, JR., and Richard Ward, of Camden, N. J., who are touring New England on their Pope motorcycles, called at the offices of The Pope Manufacturing Company in Hartford recently. Later they rode up to Westfield, Mass., where they visited the Pope bicycle and motorcycle plant. They report a pleasant trip and fair roads.

OFFICERS OF THE COLUMBIA (GA.) CLUB.



Left to right—President Page, Vice-President Ingram, Secretary-Treasurer Wright and Former Secretary-Treasurer McCollum.

OVER-ZEALOUS
DEPUTY.

IN order to capture a motorcyclist who was supposed to be exceeding the speed limit at Pablo Beach, Fla., recently a deputy drove an automobile in front of the single-tracker, causing the rider to take a serious spill. Action is being taken to recover damages by the rider who was injured.

A DESPERATE
TOURIST.

EDWARD G. NOLL, a member of the Wilmington (Del.) M. C., reports that on a recent run from Dover during a storm he was obliged to ride for several hundred yards in a wheat field, the traveling being better there than on the road.

ON TOUR TO DENVER.

R. L. WEBBER and O. G. Jennings, of Mt. Sterling, Ill., have started on a motorcycle tour with Denver as their destination. They are going by way of Des Moines and Omaha where they will strike the transcontinental trail into the Mile High City.

MUST SHOW LICENSE PLATES.

UNDER a recently adopted ordinance motorcyclists in New Orleans, La., must have a license and show number plates on their machines. The new regulation went into effect August 1.

HASHA ON NEWARK BOWL.

MANAGER PAUL DERKUM, of the recently opened Newark (N. J.) motordrome, announces that Eddie Hasha will ride regularly on the Jersey bowl for the remainder of the season.

IN six months six motorcycles used by Detroit, Mich., policemen carried the officers 30,000 miles at an average upkeep expense of \$2.18 for each machine.

WILLIAM KAPPMAYER, of Aberdeen, North Dakota, is traveling in Illinois on a 2,500-mile motorcycle trip from Aberdeen to Alton, Ill., and return.

A 1,500-mile motorcycle trip in six days is the feat of Archie Olberg and Ed Schwalbe, of La Crosse, Wis., who recently rode their machines to Fremont, Neb., and return.

MOTORCYCLE WIRELESS KIT

Miniature Outfit Mounted on Luggage Carrier Has Sent Messages More Than Fifteen Miles.

G. F. CAMPION, an English motorcyclist, has been conducting highly interesting experiments of late with a wireless telegraph outfit mounted on a motor two-wheeler and designed for use while the machine is in motion. It is stated that the tests have been quite successful. The transmitting apparatus, which is attached to the carrier of the motorcycle, has to be of the simplest possible nature, also while the machine is being ridden the aerial must be limited in height. However, as this is adjustable, being, in fact, composed of a number of lengths of fishing rod, it can be lengthened when the machine is stationary, and consequently messages can be sent to a greater distance, the height, of the aerial being one of the determining factors of the space which it is possible to cover. It is obvious that when the rider is on the move a tall attachment is out of the question, because it might foul the branches of trees, telegraph wires or any overhead obstruction, and cause an accident.

A message was successfully sent from Loughborough to Nottingham while the machine was traveling at the rate of 35 miles per hour, a distance of about 15 miles. This is quite sufficient to prove the practical use of the instrument, though it is by no means its limit. It is understood that messages have been sent as much as 30 miles.

COULD NOT STAND THE PACE.

WHEN a mad dog created a panic by dashing through the business section of Detroit, Mich., recently, Motorcycle Officer William Bird took up the chase, cornered the enraged animal and was about to shoot it when it dropped dead from exhaustion.

A LONG-DISTANCE SALE.

THE first American motorcycle to be imported into the United States of Columbia was a Pope motorcycle recently shipped to Cartagena by The Pope Manufacturing Company. This motorcycle is to be used in Bogota.

ARMY MOTORCYCLES.

DURING the recent review of the Austrian motor volunteer corps before the emperor and Archduke Frederick, in addition to the large number of automobiles, there were sixty motorcycles.

VOTE-GETTING BY MOTORCYCLE.

WILLIAM QUACKENBUSH, city treasurer of Little Falls, N. Y., who seeks the nomination for county clerk, has purchased a New Era machine with which to flit from point to point on his stump speaking trips.



OKLAHOMA CITY SQUAD.

MOTORCYCLE enthusiasts of Oklahoma City, Okla., lined up in front of the Goodyear Tire & Rubber Company's

branch prior to a recent run into the country. All the machines are equipped with Goodyear tires. The motor two-wheeler has come into favor rapidly of late in Okla-

homa City and vicinity, and merchants are now considering its advantages for city delivery service, as well as for the use of their salesmen in suburban districts.



LARGER QUARTERS NEEDED

**National Secretary Gibson Has Option
On An Ideal Office Suite for
His Busy Staff.**

WITH a view to obtaining more commodious quarters in order that his work may be facilitated for the coming fiscal year, National Secretary G. B. Gibson has called attention to his needs in the following letter, copies of which have been forwarded to President Patterson, of the F. A. M., and the Board of Directors:

"Your secretary takes the liberty of sending to each of you this circular letter, being fully aware that it is primarily the duty and prerogative of your chairman to take such a course. We believe our note will allow us to be excused for thus acting. (1) In regard to our present office location.

"As mentioned in our annual report, we must move to larger, better-arranged quarters. One of your honorable board, E. M. Estabrook, was here in Westboro, August 2, and spent a whole day with us, and is therefore fully acquainted with our situation. At present we are cramped for room, and do our important work under disadvantages. We have the refusal of a suite of five rooms, well arranged for our work, giving me a private office, a large room for our stenographers and card cabinets of records and correspondence; this room to be in charge of Mrs. Gibson; two rooms for stock rooms which can be arranged with shelves for our very big supply of printed

matter; a back room for odd storage and for the receipt and opening of supplies. Then there is connected a toilet and bath room. This suite is on the third floor of a brick block opposite the postoffice and in the same building with the local express office. I can lease this for \$200 a year, with steam heat and electric light. I have the refusal of this for one month. I can have the privilege of renewal. I wish to state that every through train on the New York Central throws off and takes on mail, of which we have a well-arranged schedule. We frequently get mail in the postoffice to a member, etc., within ten minutes of the time we receive his letter. Our office boy goes to every mail and our response is quick.

"Also much of our matter goes by express; simply take it downstairs, one of the two envelopes going to every new member, and each renewal envelope must be hand-stamped; these the office boy takes to the mailing shelf and so requests. Then much of our mail requires personal talk with the mailing clerk. This rent for what we get is very reasonable. We secure here stenographers good for our work at a low figure. Our local printer does our printing very reasonably, and gives me preference over

all his other customers for quick service, on my promise and fulfillment of paying him promptly on the first day of each month for all work done in the preceding month, less 2 per cent. discount; \$50 saved thus in 1912. Mr. Estabrook is in favor of the change and wishes it so understood.

"Up to February 1, 1912, Mrs. Gibson and I, with one stenographer, did our work in one room, heated by a stove, but that cannot be again; we require at least two office work rooms. The new place is ideal; the full side of the block next a park, five windows in the large corner room, and the side rooms have two windows each; each room has a large closet. I do not think we can be any better placed for work.

"(2) I wish the sanction of your board to purchase a safe; my personal one has always guarded our vital book records, vouchers, money, bank books and much historical statistical data. This safe is fairly bulging with its crowded contents, and much that I wish was in a safe is unprotected. I can probably get a good-sized second-hand safe for less than \$75.

"(3) I wish that some more practical plan might be adopted for designating local commissioners. Both Mr. Estabrook and I get many letters from good material who wish an appointment, and we have to state that we can do nothing, as the State commissioners do this; and that is the last of it. If some one, perhaps myself, could appoint direct these willing workers and send them their certificate of appointment and literature and stationery, it would be a good plan. But the State commissioner might then object. However, we all know that you must work this plan out."

A CRAFTY ANGLER.



FRED E. RAY, Henderson agent in Salt Lake City, Utah, as he appeared on his way home from a fishing excursion at Utah Lake recently. Ray is a fishing enthusiast, but he never fails to combine the pleasures of motorcycling with a fishing trip when the weather will permit.

CHASED AUTOMOBILE THIEF.

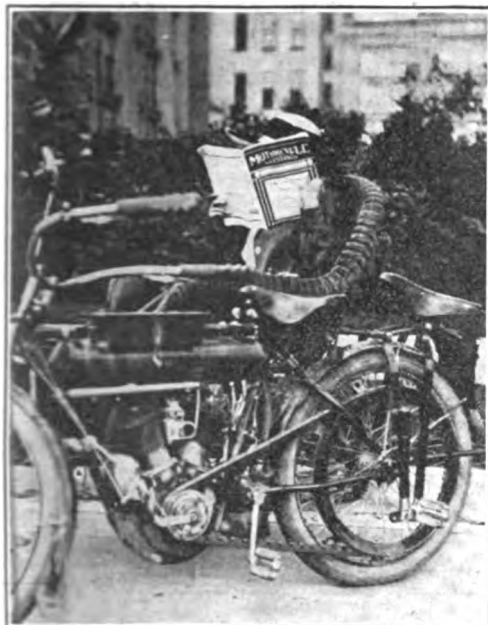
FREMONT, Ohio.—Four members of the Fremont M. C., while riding to Clyde, Ohio, recently assisted in a chase to locate an automobile thief who made away with a car that was left standing on one of the principal streets of Clyde.



William Wood, State Commissioner for Maryland.



R. S. Morton, F. A. M. State Commissioner for New York, keeping abreast of his Federation work.



Mrs. Frank L. Valiant deeply interested in the F. A. M. number of "Motorcycle Illustrated."



Miss Helen White, of Indianapolis, who rode to Columbus on a Pope machine, managing her mount like a veteran.

THE F. A. M. TOURS IN RETROSPECT

A group of interesting Columbus photographs which were crowded out of the last issue of this publication.



Charles Wetherhead, of Elkhart, Ind., who weighs 256 pounds, and who was the heaviest of the F. A. M. tourists to enter Columbus.



Jack Brandt, of the Troxel Co., welcoming Haskell, of the Harley-Davidson sales force.



Arthur F. Ferris, Harley-Davidson agent at Utica, N. Y., and Mrs. Ferris, who covered the northeastern section of the tour.

USED A ROPE TIRE.

GEORGE HUTTON, a sign painter of Los Angeles, Cal., is traveling eastward on his motorcycle and at latest reports had covered 1,850 miles. In Oregon he rim-cut a tire so that it was worthless and being unable to obtain another he made one out of rope and rode the machine thus equipped a distance of 200 miles to Boise. He states that the rope worked well on level ground but gave trouble in hill climbing.

LONG TRIP ON TANDEM.

AFTER traveling 750 miles in seventeen days on a tandem motorcycle Mr. and Mrs. Samuel Switzer, of Rock Island, Ill., have returned home completely satisfied with the outing. They rode to Minneapolis and back, encountering many stretches of bad roads owing to heavy rains.

ONE OFFICER'S RECORD.

MOTORCYCLE OFFICER BUTTON, of Watertown, N. Y., has covered 3,000 miles on the city streets so far this season and brought in speeders whose fines footed up to \$210. The upkeep expense on the machine for this period was about \$30, \$13.50 being paid for a tire and \$6.50 for a new belt. The gasoline and oil outlay was less than \$10.

BY MOTORCYCLE TO WEDDING.

FRANK MARCEAN and Francis Gilbane, motorcyclists of Providence, R. I., recently made a trip on their machines to Schenectady to attend a wedding. They made a quick change from their riding togs to more formal costumes, participated in the program and then chugged back to Providence.

MOTORCYCLISTS EXCLUDED.

THROUGH the efforts of G. H. Tomkins, representing the Richmond (Va.) M. C., an ordinance recently framed providing that all drivers of motor vehicles must undergo an examination, obtain a license and wear a badge was so amended that the motorcyclists of the city are not affected. Mr. Tomkins asserted that any rider who intended to use a motorcycle regularly must be competent to insure his own safety and that no official examination is needed. This argument so impressed the City Fathers that the clause referring to motorcycles was stricken from the new measure.

ANNOUNCEMENT is made that the Standard Oil Company has raised the price of gasoline one cent a gallon, making the rate 16 cents.

ATTRACTIVE FEATURES IN POPE "BIG 4"

New Model Has Motor With Increased Power, Offset Cylinder, Valves in the Head and Distinctive Combination Of Clutch and Idler on One Lever.

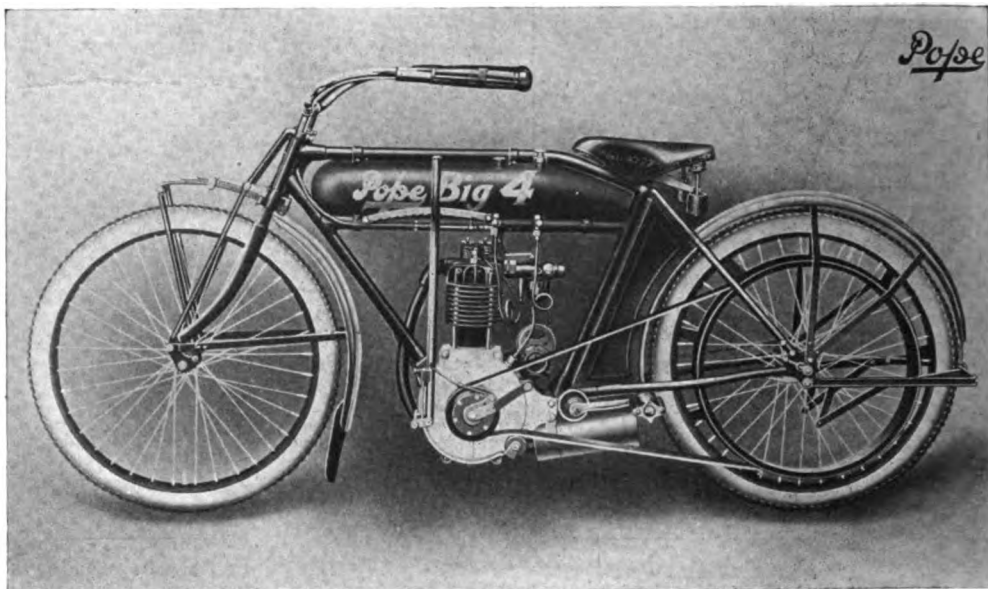
HAVING demonstrated that there is a broad field for a light, moderate-powered motorcycle, combining attractive lines and dependability at a popular price, the Pope Manufacturing Company is now offering a new machine, Model K, which will be marketed in conjunction with Model H, the type with which the company has already won a large following. Model K will be known as the "Pope Big 4," owing to its provision for more power than is usually credited to a 4 h. motor, and it embodies a number of features of special interest. It has an offset cylinder, eliminating a dead center and insuring maximum power at low speeds; cylinder and head separately cast, to prevent carbon deposits and facilitate cleaning; valves in the head, interchangeable and mechanically operated; combination clutch and idler, operated by one lever and giving thorough control of the transmission; Pope spring fork, and frame with motor as keystone, giving a low center of gravity.

It will be seen from reference to these features that Model K is a worthy follower in the path blazed by Model H. While designed along the general lines of the first model the new machine is intended to provide greater power and speed and to meet all the demands of the Pope enthusiast whose need is for a machine of broader scope than Model H. The motor fitted to Model K has a piston displacement of 30.50 cubic inches, and is guaranteed to have a comfortable margin over 4 horsepower. In this connection the valves in the head are worthy of note. Providing as they do for direct entrance of the mixture they permit of maximum force in the line of best advantage, directly downward. Both intake and exhaust valves are mechanically operated and are located in the exact center of the explosion head.

Unusual length in the crankshaft and generous weight in the flywheels make for efficiency and long life in the motor. The flywheels are nine inches in diameter and total 25 pounds in weight. The bearings are of phosphor bronze of ample size.

A distinctive feature in the new model is the combination clutch and idler. One lever governs the operation of the belt and the control of the clutch, instead of two, as formerly. The single lever works from three positions, thus permitting of the best results at a slow pace, on hard pulling and at high speeds. The Eclipse free engine clutch is standard equipment. The frame of Model K possesses distinct characteristics of beauty and efficiency. A long, well-braced steering head effectively supports the front wheel, and a drop top bar affords a low saddle position. Reinforcement of connections, a girder-plate construction and a system of dip brazing give the frame unusual rigidity.

The machine is provided with a hand force pump and splash lubrication. Fresh oil is constantly drawn from the tank and delivered into the camcase where it thoroughly lubricates all the working parts, through ducts and passages. A window is



provided in the right side of the motor-base, acting as an oil gauge. The machine has double grip control, the right grip operating the compression release and spark, and the left grip controlling the throttle. The transmission is by 1 $\frac{3}{4}$ -inch flat, endless belt, which with the combination clutch and idler control affords a flexible and still thoroughly dependable transmission of power. The wheelbase is 56 inches and 28-inch wheels are fitted. An up-to-date addition has been made to Model K in the shape of a large metal tool box, placed between the seatmast and the rear guard. A large door gives easy access to the tools. A large tire pump fastened to the frame and a quart of oil also accompanying each machine.

The Schebler automatic carbureter, type H, is fitted, and the Herz magneto is standard equipment. The two-compartment tank carries two gallons of gasoline and two quarts of oil. A 10-inch muffler makes silence a feature in the operation of the machine. Large mudguards, 3 $\frac{3}{4}$ inches in width and 21 inches long, make for cleanliness and the comfort of the rider. The Persons "Champion" saddle is standard equipment and the front wheel has an Eclipse knock-out axle. The rear wheel carries an Eclipse coaster brake. United States tires, 28 by 2 $\frac{1}{2}$ inches, are supplied. The finish is London Smoke, with blue striping and all bright parts are nicked. The standard gear ratio is 4.6 to 1; optional, 4 to 1. Model K is listed at \$200.

HANDY BREED ATTACHMENT.

AN attractive tandem attachment, showing sturdiness and simplicity in construction, is now being marketed by the Breed Manufacturing Company, of Bay City, Mich. The attachment is designed to fit any machine, all its parts being adjustable, and folding steps practically eliminate the danger of breakage. As it is usually the footrests that suffer in a spill the Breed company has constructed them to fold up against the downrunners. This arrangement also adds to the appearance of the machine when the tandem is not in use. The attachment is handled only at wholesale. Full information and literature will be forwarded promptly on request.

NEW VICTOR FACTORY.

THE Victor Lamp Company of Cincinnati, Ohio, which manufactures motorcycle lamps and tool boxes for automobiles as well as automobile lamps, has been forced to open a new factory to meet the enormous demand for its products.

NEW GOODYEAR BRANCH

MINNEAPOLIS, Minn.—A. F. Osterloh, manager of the western division of the Goodyear Tire & Rubber Company, has been in this city of late to close negotiations for the construction of a three-story building at Hennepin avenue and Twelfth street. So rapid has been the growth of the Goodyear company's business here, both in motorcycle and automobile tire goods, that new quarters were found to be absolutely necessary.

BUSY AT HAGSTROM FACTORY.

BETWEEN shipping its improved spark plugs and other motor accessories and mailing its free Prest-O-Lite tank keys, the Hagstrom Bros. Manufacturing Company, of Lindsborg, Kan., has been so busy of late that it has been obliged to work with an increased staff. By way of getting acquainted motorcyclists are invited to write for one of the tank keys and also make any inquiries that suggest themselves. Both key and information will be forthcoming promptly.



FROM A BRITISH SPORTSMAN.

THAT the sporting spirit among English motorcyclists extends to something more than fair treatment of a rival in competition is evidenced by a letter received a few days ago from T. A. Carter, manager of The Purley Motorcycle Depot, 6 High street, Purley, Eng., enclosing a substantial money order to be added to the Jake DeRosier benefit fund. Mr. Carter collected over \$25 in shilling contributions on the Isle of Man during the Tourist Trophy races, and he is still at work raising money for the fund. Carter is a motorcyclist of

wide experience who met DeRosier during his visit to England last year. He took a fancy to Jake, and is now demonstrating his esteem in a most practical manner. The money order has been forwarded to DeRosier at the Crocker Street Hospital, in Los Angeles.

Carter, by the way, is anything but a mollycoddle when it comes to pushing the miles behind him. The accompanying photograph shows him astride his 8 h. Matchless racer with sidecar. He has turned off 63 miles an hour at Brooklands with this mount, which, as will be noted, has every mark of a record-crimper.

SENSATIONAL SPILL ON NEWARK BOWL

NEWARK, N. J., August 5.—In a sensational spill that occurred during the running of the elimination trials at the Motordrome on Sunday afternoon. Charles Davis, the Brooklyn motorcycle speedster, came within an ace of being fatally injured. The race, which was fifth on the card, was one of an elimination series that is being run at the track to settle the track championship. Davis's opponent was Freddie West, of San Francisco, the former bicycle rider, who has taken part in numerous six day races here.

At two miles West had picked up all but fifty yards on Davis. At five miles West reached Davis's rear wheel, but could not get up enough speed to go by. The men traveled in this position for three miles, neither gaining a foot.

At nine miles West was all in and quit, shutting off power and coasting around the track at the bottom. Davis meanwhile was sailing around the bowl at about eighty miles an hour. The second time around, after West shut off, he stopped, and was just dismounting in front of the riders' paddock when Davis, who had ridden himself practically blind, struck West with his shoulder. West was hurled to the ground. Davis was sent spinning up the track, and after describing two complete pinwheels finally rolled to the bottom, senseless. Davis's machine hurtled through the air and along the track for eighty yards before coming to a rest.

West had no injuries other than a bruised shoulder and competed in the other races of the day. Davis, who was unconscious, was later removed to the German Hospital. His injuries consisted of a broken finger, and a bad cut over his right eye. Later he complained of a pain in the chest.

Eddie Hasha was in his speediest form. He covered two miles in the final heat of the Class A race in 1 minute 17 seconds. His last mile was caught in 37½ seconds, the fastest time for a mile ever ridden on a five-lap track. He won all three heats of Class A and took the five-mile free-for-all.

Summaries:

New Jersey Club Race, 4 miles, amateurs—Won by William Brown; second, Carl Segelbach. Time, 3:18½.

First heat, Class B, professional, 2 miles—Won by F. A. King, Denver (Indian); second, Albert Carlson, Providence (Indian); third, C. E. Davis, Brooklyn (Indian). Time, 1:29.

Second heat, Class B, 3 miles—Won by F. A. King, second, Freddie West, Los Angeles (Indian); third, C. E. Davis. Time, 2:14.

Final heat, Class B, 5 miles—Won by F. A. King, second, Albert Carlson; third, E. S. Eckel, Washington, N. J. (Indian). Time, 3:47½.

Professional Motordrome Sweepstakes; elimination No. 2, 10 miles, 1 lap—Won by C. E. Davis; second, West. Time, 7:35½.

First heat, Class A, 2 miles, professional—Won by Eddie Hasha (Indian); second, Ray Peck (Excelsior); third, L. Flickenstein (Indian). Time, 1:24½.

Second heat, Class A, 2 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 1:26.

Final heat, Class A, 2 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 1:17.

Two miles, amateur—Won by Constant, of Brooklyn (Indian); second, Eckel. Time, 1:23½.

Free-for-all, 5 miles, professional—Won by Hasha; second, Peck; third, F. A. King. Time, 3:22½. Charles Fuller Gates, referee.

NEWARK, N. J., August 3.—Chas.

Fuller Gates, having arrived in town from the West, Manager Paul Derkum, of the motordrome, promptly made him referee for tonight's meet to the consternation of the riders, especially the Western men. The "Satrap" proved to be an ideal official, however, to the relief of the Eastern boys, who imagined that he would fine them if they even attempted to clean their machines. Gates acted very fatherly with all the riders, and his work was appreciated. Hasha, as usual, cleaned up in true Texas style. The main feature of the day was an Australian pursuit race series which was started today, and will continue for several meets. F. A. King, of Denver, and C. E. Davis, of Brooklyn, started. The race was won by Davis. The boys rode eight miles and three laps before Davis overtook King. The winner rides Freddie West, of San Francisco, tomorrow and the winner of that heat will race Johnny King, of Newark, next Saturday. The event proved very exciting. J. U. Constant, of Brooklyn, the amateur champion, broke his record of 46 seconds for the track by doing the mile in 45½. The most exciting race was the third heat for the Class A men, in which Eddie Hasha spun around the saucer at a 39-second clip, doing the two miles in 1:18. Summaries:

New Jersey Club Race, amateurs, novelty event—Won by Carl Segelbach (Indian); second, Billy James (Indian); third, Seth Eberhardt (Indian). Time, 1:29½.

Class B, 2 miles, professional—Won by Freddie West (Indian); second, C. E. Davis (Indian); third, Albert Carlson (Indian). Time, 1:29½.

Second heat, 3 miles—Won by West; second, Davis; third, F. A. King. Time, 2:14½.

Final heat, 5 miles—Won by F. A. King; second, Davis; third, Carlson. Time, 3:48½.

Professional Motordrome Sweepstakes, Elimination No. 1—Won by C. E. Davis; second, F. A. King. Distance, 8 miles, 3 laps.

One mile exhibition by J. W. Constant. Time, :45½.

First heat, Class A, 2 miles, professional—Won by Eddie Hasha (Indian); second, Ray Peck (Excelsior); third, L. Flickenstein (Indian). Time, 1:23½.

Second heat, 2 miles—Won by Eddie Hasha; second, Ray Peck; third, Flickenstein. Time, 1:24½.

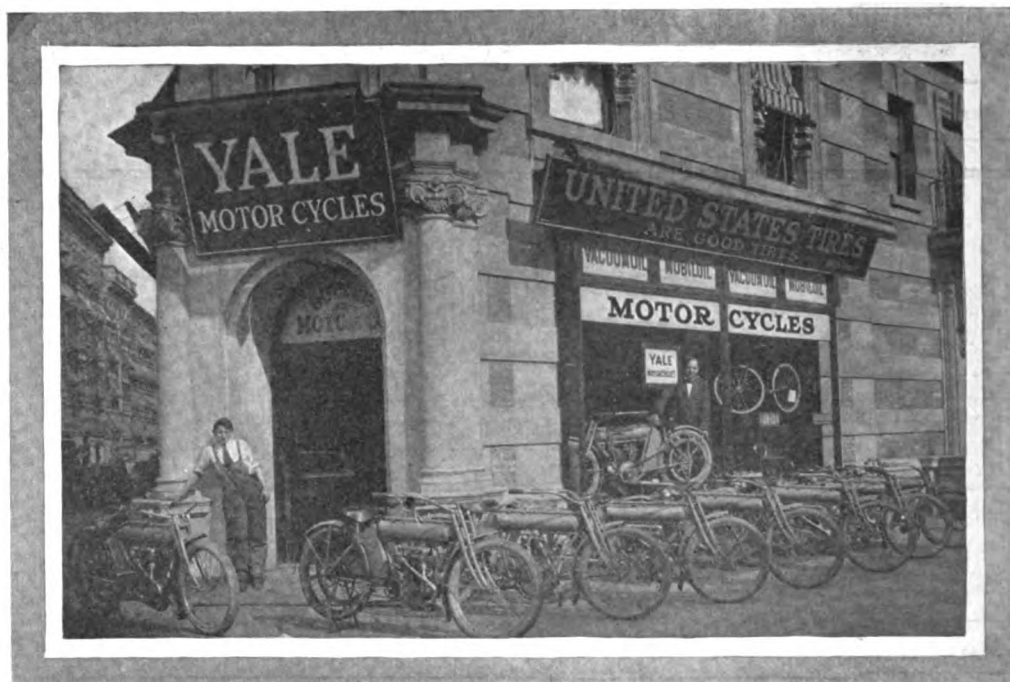
Third heat, 2 miles—Won by Hasha; second, Ray Peck; third, L. Flickenstein. Time, 1:18.

Free-for-all, 8 miles, professional—Won by Hasha; second, Ray Peck; third, L. Flickenstein. Time, 5:33½.



WINNER OF ROAD RACE.

ALFRED BITTNER, of Anaheim, Cal., who appears in the accompanying photograph, was the winner of the 20-mile road race held at Anaheim on July 4. The twin Indian shown in the picture is the one on which he led the field home. Photograph forwarded by William H. Houts.



Exterior and interior views of the store of the Gotham Motor Company, New York Agents for the Yale, 92-98 St. Nicholas Avenue.

STOLEN MOTORCYCLES.

FIVE Harley-Davidson machines, as listed below, have been reported stolen: Single-cylinder, 1912, battery model with free wheel control; engine number 363 B. A.; State license number 1031; Ever-Ready speedometer, Prest-O-Lite tank, head and tail lights, Goodyear studded tires; reward, \$25. Notify George Krueger, 2016 Thirteenth street, Chicago, Ill.

Magneto, 1912 model, with free wheel control; motor number 1288 B; machine almost new; stolen from Dallas, Texas, on July 9. Reward, \$20. Notify George Huter, Dallas, Texas.

Chain-drive twin, from a St. Louis garage, July 19. Engine number 4708 B. Owner says: "Anything you can do in locating this machine will be rewarded and greatly appreciated." Notify E. V. D. Wallace, 5021 Minerva avenue, St. Louis, Mo.

1911 single, 26-inch wheels; stolen recently in Kenosha, Wis. Motor number 9774. Equipped with Majestic tandem, Purdy whistle, generator, head and tail lamps. Notify Robert Bentz; reward, \$25.

Magneto single, shipped from factory to Chicago. Except for 25 miles on road when tested machine had never been ridden. Equipped with free wheel control, Goodyear studded tires and Troxel saddle. Notify C. H. Lang, 1704 Michigan avenue, Chicago, Ill.

NEW METROPOLITAN CLUB.

GOFF & BURKE, proprietors of a motorcycle establishment at 521 West One Hundred and Sixty-fifth street, New York City, are the founders of a new club known as the Washington Heights M. C. For the present the headquarters of the club will be at the Goff & Burke store. Touring riders are invited to drop in and members of the F. A. M. on tour are accorded the privilege of storing their machines overnight without charge.

R. G. MOON, Carbondale, Pa., is the sixteen thousandth member of the F. A. M.

LITTLE JOE'S NEW DEAL.

BALTIMORE, Md.—Little Joe Weisenfeld, local agent for Thor and Yale machines, has just completed a deal whereby he secures two pieces of property adjoining his motorcycle headquarters at Howard and Baltimore streets. As a result he will be able to enlarge his sales and stock rooms to such an extent that he will have the largest establishment of its kind in the city.

AN UP-TO-DATE CORONER.

DR. S. G. McDONALD, coroner of Montgomery County, Kan., living at Coffeyville, has purchased a motorcycle to use in his work, thus discarding the horse and shay. The doctor is using a new Era machine which has just recently been delivered to him and is now one of the best boosters the motorcyclists of Coffeyville have.

THE Auto Cycle Company, of 514 St. Peter street, St. Paul, Minn., announces that it has taken the agency for the Henderson in the Twin Cities. The company has recently acquired the agency for the Flanders.



H. G. Baxter, Henderson Agent in Providence, R. I., on his new Demonstrator.

CLEVELAND NOTES.

CLEVELAND motorcyclists are now carrying their 1913 license numbers. They are white on black plates and must be carried perpendicularly; there is a provision against having them placed in a curve on the mudguard.

L. J. Mueller reports that he is receiving Indians by express, being unable to get them in large shipments. He has disposed of nearly nine carloads so far this year.

The Lister Motorcycle Company has sold nearly 125 Flying Merkel machines and about 500 Harley-Davidsons for the season. Despite this activity the firm is still behind in filling orders.

The West Side Motorcycle Company has placed over 50 Harley-Davidsons on the west side, and there are indications that this number will be considerably increased during the coming month.

Kumler Bros., agents for Flanders and Reading Standard machines in Cleveland, have taken on the Yale agency also. They have several of the chain-drive Yale twins on exhibition.

The K-V Motorcycle Company has sold eight Henderson machines, although they made a late start. This firm will also handle the Wagner in Cleveland and vicinity.

NEW TRIUMPH AGENCY.

HARRY SVENAGAARD, of Detroit, Mich., has taken the Triumph agency for the Straits City and vicinity. As a result he has extended his establishment at 473 Woodward avenue so that he will have a floor space 70 by 70 feet.

MOTORCYCLE SUPPLY COMPANY, Pawtucket, R. I.; capital \$10,000; directors: Berndt A. Svenson and Edward A. Leetz, both of Providence, R. I., and Clifford G. Frazier, Pawtucket, R. I.

SAM B. FOWLER and Palmer W. Shade left Dayton, Ohio, recently for a motorcycle tour into Canada.

AN UP-TO-DATE GARAGE

New Establishment, Under Management of Gene Coughlin, Has Storage Space for at Least Fifty Machines.

ONE of the largest and best-equipped motorcycle garages in New York City, has recently been opened at 533 West 110th street, under the name of the Riverside Motorcycle Garage. The garage proper measures 25 by 100 feet and has a floor capacity of over 50 machines. The main floor has the front occupied on one side by the counter and showcases, with full frontage for window space, and the latter is attractively dressed at all times. The remaining portion of the floor is divided into a large storage space for machines and a small but convenient shop. The latter has a well-fitted work-bench with vise, etc., and a grinder and drill press are located conveniently to the bench, so that work can be done with minimum confusion. The tools are kept in a large closet, with a place for each, so that any tool can be readily reached without disturbing any other. The main floor is electrically lighted, and the overhead shafting for the machine tools is driven by an electric motor.

A yard is located at one side of the garage, and work is done here when the weather is fine. This yard is floored and is 100 feet long by 15 feet wide. The shop is screened off from the storage room. On the upper floor, there is a large clubroom, fitted with comfortable, upholstered chairs and sofas, while the locker space is sufficient for over 60 patrons. It is the intention of the management to organize a club in a short time.

The second floor is fitted with apartments for the manager and has a bathroom in addition. The clubroom can be reached by a private entrance from the street or through the garage as desired. Additional locker space is to be found in a building at the rear of the garage, which is fitted as a private house. The location is an ideal one, being on one of the uptown thoroughfares, which is asphalted, as are all communicating streets and avenues. A full line of accessories is carried.

The garage is under the management of Eugene Coughlin, well known in Greater New York as a first-class repairman.



The Excelsior and Indian Agency of Austin Burges in Houston, Texas.

COX MAKES A CHANGE.

ANNOUNCEMENT is made by The Pope Manufacturing Company that L. D. Harden has been appointed manager of its bicycle and motorcycle sales department to succeed J. F. Cox, resigned. Mr. Harden has been with the Pope company for over twenty-two years. For several years past he has been assistant manager of the department which he now heads. During his long service in various capacities, Mr. Harden has become thoroughly acquainted with the company's bicycle and motorcycle business and identified with the trade in all its aspects.

After being with the Pope company twenty-seven years, Mr. Cox has become president and general manager of the E. T. Burrowes Rustless Screen Company, of Portland, Me. His resignation went into effect August 1.

Frederick W. Starr, also well known to the trade, has been appointed to succeed Mr. Harden as assistant manager of the bicycle and motorcycle department. Having been assistant manager of the Pope bicycle plant at Westfield, Mass., for a number of years, Mr. Starr brings to his new position a thorough knowledge of bicycle and motorcycle manufacturing.

KLARK ACCEPTS POSITION.

COLUMBUS, Ohio.—Don Klark, the Indian rider, has taken a position as general utility man with the Barr Motorcycle Company, of Columbus, central Ohio distributor for the Indian. Klark has not given up racing, but will devote his time while not on the track to the Barr company.

THIS WAS "SOME BELT."

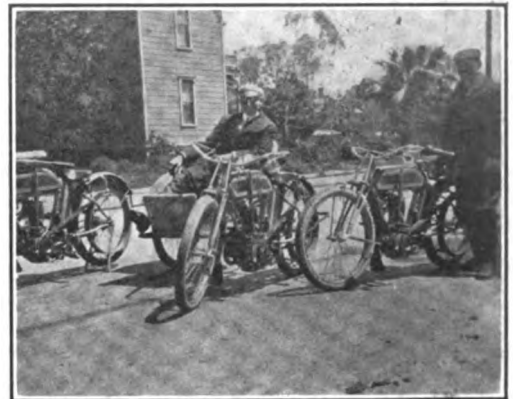
THOMAS CHANDLER, of 613 So. Boman street, Danville, Ill., is an economist who deserves to go on record. Recently he forwarded the following letter to the Chicago Belting Company: "I have used one of your Sea Lion belts for 6,000 miles and sold it for \$5."

MINNEAPOLIS, MINN.—Thull & Julian, of 413 Fifth avenue south, are now handling the Thiem in this city. They have also opened a shop for motorcycle accessories and supplies.



Above—Part of the California Motorcycle Company's store at 16th and Hill streets, Los Angeles.

Below—Los Angeles riders of the Eagle.



NEW MINNEAPOLIS PLANT.

MINNEAPOLIS, Minn.—A definite announcement regarding the enlargement of the Minneapolis motorcycle factory to nearly five times its present output, was made this week following the return from the East of H. F. Turner, sales manager of the firm. Mr. Turner states that through the large increase of the motorcycle business in the Northwest, not only in the cities but in the country as well, the firm has decided to enlarge its factory and has several sites in view on the outskirts of Minneapolis where a factory can be built with better shipping facilities than the company now has. The building will be 250 feet by 300 and will be of fireproof structure. It will be two stories in height and the plans will be drawn with a view of further additions in the next five years.

COLUMBUS, Ohio.—John M. Schuster, a retired bicycle and motorcycle dealer of Columbus, died at his home 2226 North High street, after an illness of a year. He was formerly in the motorcycle business under the name of Schuster & Seibold.

WILL A. HARRIS, of Point Rains County, Tex., is known as the "motorcycle candidate" for Congress throughout his district. Harris has been making a strenuous campaign on his motor two-wheeler.

THE Supervisor of the Toronto Play Grounds Association rides a Pope motorcycle in traveling about the city. He weighs 225 pounds.

TWENTY-FIVE motorcycles figured in races incident to a regatta held at Stone Harbor, N. J., recently.

QUESTIONS and ANSWERS

MANY replies to the second question of the series begun in the issue of June 27 have been received and the winners will be announced in the next issue. The editor of the Questions and Answers Department wishes again to state that answers should be written so that the novice, and not only the more experienced rider, will understand the functions and construction of the device in question and that unnecessarily long letters should be avoided. A majority of the answers departed from the subject and thus were not eligible for the prizes. Care should be taken to give clear and complete answers. The answers to Question No. 3, given below, will be judged and the results published in the September 5 issue. For the benefit of readers in general the conditions of this contest are given again.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the second issue following the number in which each question is asked. For example, answers to question Number 2, republished in the present issue, will be printed in the issue of August 22. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of MOTORCYCLE ILLUSTRATED are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York."

Question No. 2. Describe the construction and functions of a spark plug.
Question No. 3. Describe, so that a novice will understand, the operation of a high-tension magneto. Answers published in September 5 issue.

FRANK

MERRITT

ALUMINUM PISTONS.

BYRON C. RACE.—The aluminum pistons are made from special alloys of aluminum and are not of aluminum alone. They are cast in dies as a rule, but occasionally made in the sand, or in metal molds. The idea is to get a very light piston, and if properly constructed they will keep their shape until worn out or broken in service. Such pistons crack before bending, and are fitted with one or two rings only. A set of alloy pistons may last one race, or as much as thirty events, but their life is uncertain. They are unsuitable for touring, and we strongly recommend the retaining of the regular cast iron pistons that came with the motor. Their cost is very great; for die-cast pistons, it is necessary to have dies cut, which is a considerable item, as you probably know. Then the machining is a delicate job, and the two pistons must be equal in weight, lightened connecting rods must be used, etc.

OILING AND OTHER TROUBLES.

J. L. MOORE.—See that the oil leads are clear. This may account for the front cylinder not getting enough oil. The check valve occasionally sticks and the pipe thus gets clogged. It would not be a very expensive operation to transform the machine to a chain drive. There would be machine work to be done on the front or motor-shaft where the pulley goes now, and the rear sprocket would have to be very large to get a single reduction. In

fact, it is doubtful if you could get a sprocket sufficiently large for the purpose. If so, more machine work and fitting to accommodate the sprocket in place of the pulley is necessary. If a double-transmission, chain-to-countershaft and chain to rear wheel were used, there would be further expense in fitting the countershaft to the frame of the machine and the manufacture of the countershaft. This is of course figuring on other than the factory doing the work. We suggest that you communicate direct with the factory before starting to make any such change; they may be able to have the work done for you in their shops. The tread of a side-car is usually between 36 and 39 inches. The best practice has the side-car and motorcycle rear wheels on line.

WORLD'S RECORDS.

JOHN HILL.—There are no "world's records" on motorcycles. The F. A. M. acknowledges officially certain "best performances" in both the professional and amateur classes, but no international records, hence, the term "world's record" is a mis-statement as regards motorcycles.

The Federation does not distinguish between a dirt and a board track in considering records for speed, distance, etc., hence there can be no official dirt-track records. Each local track has its (unofficial) record for various powered machines, and the promoters often fondly call the best times made "world's records" for that track, etc.

The fastest professional mile officially recognized was made by Ray Seymour, on May 17, 1912, at Los Angeles, the time being 0:36 $\frac{3}{4}$. The amateur mile record is held by Lon Clafin, and was made at Los Angeles on the same date; the time is 0:38 $\frac{1}{4}$. This with a flying start. The standing start one-mile record is held by Charles Spencer, 0:55 $\frac{1}{4}$ and was made at Springfield, Mass., on October 23, 1909.

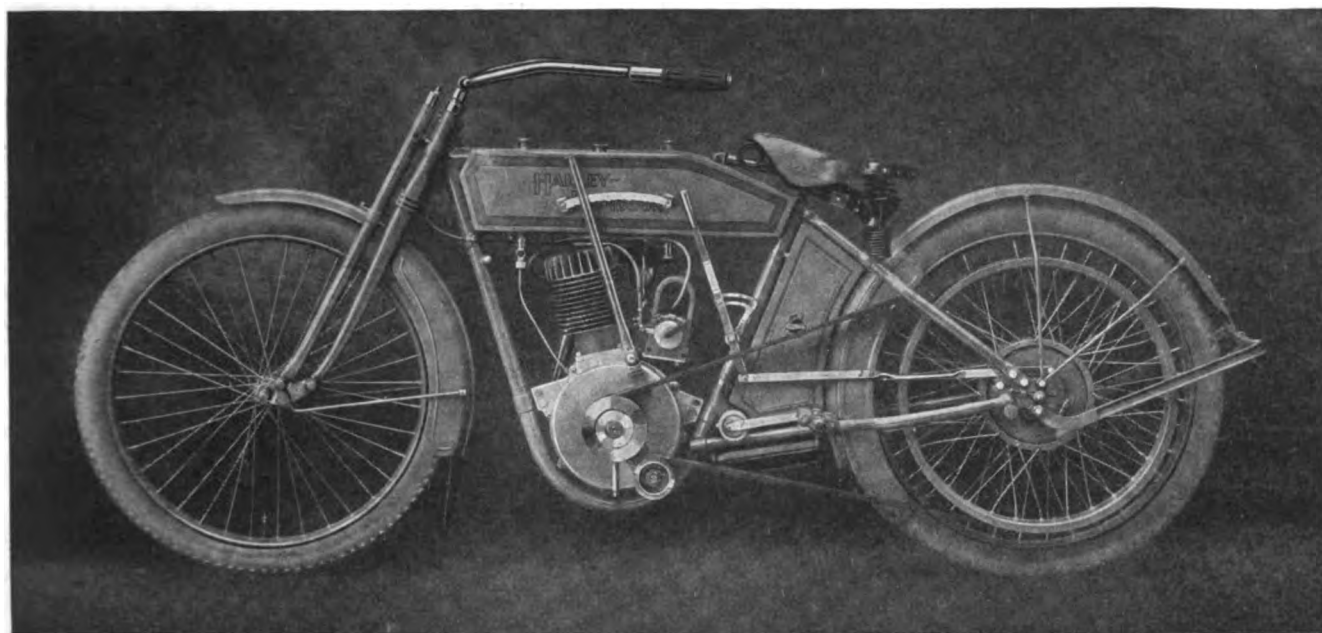
LACK OF ECONOMY.

LOUIS H. ROESSGEN.—You should be able to get at least 65 miles or even better per gallon of gasoline with your motor, if it is in good condition. The overheating shows that you use too much, so cut down on the needle-valve, noting the color of the exhaust. On the lowest speeds this should be a deep blue verging on violet, and as the speed rises, the color should weaken, never losing the blue tint. If the color is yellowish tint shows that the mixture is too lean; give more jet opening. A red tint shows too rich a mixture cut down on the jet opening. See the MOTORCYCLE MANUAL, page 23, paragraph 56.

EUROPEAN ROUTES AND HOTELS.

WE have now on file several up-to-date European road maps. Readers who contemplate motorcycle tours on the Continent are invited to request from us such information as we have on hand covering European routes and hotels.

(More Answers to Questions on page 54.)



“I Have Ridden my 1910 Harley-Davidson 20,609 Miles and it is in A1 Condition Today.”

**J. N. HOWE, Supt.,
Electrical Department,
Northern Indiana Gas & Electric Co.**

No motorcycle in which quality and service are only secondary considerations could render service like that.

Thousands of Harley-Davidson riders have received the same satisfaction as Mr. Howe and many could write testimonials even stronger than his.

Good material and careful work cost more than cheap material and indifferent work, but neglect either one of these and the owner is the one who will really pay for it.

Correct design coupled with the right material and careful workmanship have made the Harley-Davidson's reputation.

“COSTS MORE, BUT WORTH IT.”

Harley-Davidson Motor Company

260 C Street

Milwaukee, Wisconsin

(Answers—Continued from page 52.)

CARBURETER TYPES.

W. A. RHOADS.—Carbureters for motorcycle use can be classed into three types. These are: Hand-controlled, semi-automatic, and automatic. In the hand-controlled type the primary air may or may not be regulated by a shutter, but the secondary or auxiliary air is regulated by hand, by moving a valve. The jet opening in this type is fixed. On starting with a hand-controlled carbureter, the primary air shutter is adjusted by running on the stand, and the auxiliary air valve closed to get a rich mixture. When running, the auxiliary air is regulated according to the requirements of the road, etc. The Brown & Barlow carbureter is of this type, as are the great majority of European carbureters.

The semi-automatic type has the jet opening controlled by hand or by the movement of the throttle, with the auxiliary air opening regulated by a spring-loaded valve operated by the suction of the motor. Some of these carbureters have a further adjustment on the needle-valve for low and high speeds. In operation, the jet opening is adjusted and the tension of the auxiliary air valve spring adjusted. Once set the adjustment needs changing only when the weather conditions or load conditions change. The Schebler, Breeze, etc., are of this type.

In the fully-automatic type, the primary and auxiliary air are taken through the same opening past the jet, the flow past the jet being governed by specially cut ports in the throttle barrel. Atmospheric changes are met by changing the jet itself, but this operation is rarely necessary. This type is the most scientific carbureter of the types mentioned and gives great economy. An example is the Claudel. There are of course a number of types combining the automatic features in semi-automatic carbureters, etc.

A BIG CONTRACT.**New Harley-Davidson Building.**

AN interesting view of the new addition to the Harley-Davidson factory in Milwaukee, in the construction of which 14,000 tons of concrete and 250 tons of steel are being used. The extension will add 90,000 square feet to the floor space of the plant.

NEW YORK TO BROCKTON, MASS.

C. M. FARRELL.—Take route 39 (Touring Number) to Hartford, Conn. Take route 13, Hartford to Worcester, Mass.; then route 10 reversed, Worcester to Boston. From Boston go to Milton, then on to Great Pond, Randolph, Avon and Brockton. The distance is 21 miles and the roads good. A trolley line can be paralleled most, if not all, of the way from Boston.

ON OVER-OILING.

J. O'LEARY.—You have too much oil in the crankcase, if the oil comes out at the push-rod, or the breather may be clogged up. Reduce the amount fed in and first drain the crankcase. Was there no instruction book with the machine? It may be necessary to flush out the motor with kerosene or dismount it and clean it thoroughly to free it from carbon. It is obviously in poor condition from over-oiling.

For the correct mixture proceed as follows: Get into a place where the open exhaust will not disturb anyone, then remove muffler and exhaust pipe. Start the motor and reduce the throttle opening by means of the grip to as small as possible (i. e. throttle her down.) Turn the needle valve on the carbureter until the exhaust flame is violet-blue. Run the motor on the stand and gradually give more throttle, being sure to have the spark advanced as far as possible at all times without the motor knocking. The exhaust gases should be lighter in color as the speed of the motor rises, but should never lose the blue tint. This violet-blue tint at low speeds is the sure sign of a perfect mixture. Try the same adjustment (with the muffler and pipe in place) on the road; it will generally be good for this also. Adjusting the mixture by sound is rarely satisfactory. There are but few experts that can get a perfect mixture that way, and the average repairman is far from being an expert.

See that the carbureter and valve gearing are in good condition and that the various oil channels are free. Did the agent guarantee that the machine was a new one? If the above does not help you, have the motor overhauled at a first-class repair shop; there are a number of good ones in New York.

TRENTON TO TRUMANSBURG, N. Y.

ARTHUR W. HYDES.—Referring to our Touring Number, take route 65 to Easton, Pa., at Trenton (33.0 miles). Go on to Easton, join route 60 to Delaware Water Gap. From Water Gap go to Stroudsburg, then to Bartonsville, Tannersville, Henryville, Paradise, Cresco, Pocono, Tobyhanna, Gouldsboro, Moscow, Elmhurst, and Scranton. The distance is 52.7 miles and the roads are fair, with waterbars and rough stretches between Tobyhanna and Moscow.

From Scranton take route 68 to Watkins Glen. From Watkins Glen go to Trumansburg through Burdett, Bennettsburg, Reynoldsville, and Perry City. Trumansburg is reached from an irregular 4-corners 19.4 miles out of Watkins Glen and 5.1 miles from Perry City. Follow macadam to left into Trumansburg. Roads, Watkins Glen to Perry City, fair to good dirt, fine views.

TO GREENWOOD LAKE, N. J.

A. W. HOLME.—From Ridgewood go over to Paterson. From Paterson go to Pompton, then to Wanaque, Boardville, Hewitts, Browns and Greenwood Lake, N. Y. The distance is 29 miles, the roads are good macadam to Pompton, then rather rough and narrow along shores of lake. This is part of route 36 in our Touring Number, from Pompton onward. Return by the same route.

NEW YORK TO LIVINGSTON MANOR.

G. GEORGE SATTLER.—From our May 16 Touring Number take route 36, New York to Greenwood Lake. From Greenwood Lake go on to 56.0 Bellvale, 59.5 Warwick, 65.1 Florida, 70.7 Goshen. From Goshen as 0.0 miles go on to 3.6 Denton, 8.4 Middletown, then 16.0 Bloomingburg. Here turn off left and go on to 20.6 Wurtsboro. Go on from the latter place to Rock Hill (27.6), then bad curve at 28.9, Neversink river covered bridge (29.0), and 33.0 Monticello. Bushville is 38.7 miles out of Goshen. Liberty is 45.2 miles, Parksville is 49.3 and Livingston Manor 54.9 miles. Roads, fair to good dirt, Greenwood Lake to Goshen; good roads with some dangerous crossings, etc. to Livingston Manor. Total distance 125.6 miles from W. 130th st., N. Y.

VERSATILE AIR-MAN.

PAUL PECK, of Washington, D. C., is one of several aviators who hanker for a motorcycle when they are not following a sky route. Peck rides a Flying Merkel machine and also owns an automobile. The latter, however, has been crowded out of the running of late, as Peck devotes most of his time to the motorcycle when on the ground. Photo shows him on his Merkel.



THE railroad has now discovered a unique possibility for the two-wheeler. One company has found that a motorcycle can be attached to the hand-car to furnish power for the latter.

GOODYEAR EXTENSIONS.

EXCAVATIONS are being made for another big building at The Goodyear. This addition to the present great factory group will be 400 feet long and 80 feet wide. It will be six stories high with basement, and will be made as nearly fireproof as possible. The Goodyear company is also adding two stories to two of the present buildings. Each of these buildings is 450 feet long and 60 feet wide. The new buildings

**The Present Goodyear Plant.**

and the two new stories will give the plant additional floor space of 266,000 feet, making in all a total floor space of 1,266,000 square feet.

The hills show how well your lubricant suits your motor.

With the wrong oil your motor must overcome both the hill and the faulty lubrication.

You will find that the correct oil carries you much more easily over the hills at high speed. On heavy roads the correct oil will yield more power, and give freedom from overheated motors.

Even the best of motors sometimes give trouble on a hard hill or a sandy road. Under these conditions the help given by correct lubrication is noticeable.

Different types of motor demand different grades of oil. By a thorough analysis of various motorcycles, we have prepared a complete lubricating schedule (printed on the right). It gives the grade of oil that will yield the greatest power from your motor.



In power-engineering circles these recommendations from us would be accepted as authoritative. You may feel assured that, in quality, the oils specified on the chart set a world standard.

They are put up in barrels, half-barrels, and in 5 and 1-gallon sealed, white cans.

The oils for motorcycles (refined and filtered to remove free carbon) are named:

Gargoyle Mobiloil "A"
Gargoyle Mobiloil "B"
Gargoyle Mobiloil "Arcctic"

All are branded with the Gargoyle which is our mark of manufacture.

TO THE TRADE

By carrying Gargoyle Mobiloils, with our chart of recommendations, you can say to the driver of any car or motorcycle: "I can give you the correct grade of oil for your motor. It is recommended by the Vacuum Oil Company—the recognized leaders in lubrication."

By handling Gargoyle Mobiloils you

also get the benefit of the strongest advertising campaign ever run for automobile lubricants. In addition to all the leading automobile and motorcycle magazines, we are running our large space advertisements in the Saturday Evening Post, Collier's, Literary Digest, Life and Scientific American. Later we will advertise in leading monthly magazines.

This list shows the right oil for your motorcycle.

Explanation: In this schedule the letter opposite the name of motorcycle indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." Recommendations cover all types of the same make unless otherwise stated.

MODEL OF MOTORCYCLE	1908		1909		1910		1911		1912	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
American.....					B	A	B	A	B	A
Apache.....	B	B	B	B						
Armstrong.....	B	A	B	A						
Arrow.....									B	B
Augustin-Koch.....									B	B
Aurora.....									B	B
Auto-Bi.....	B	A	B	A					B	B
Black Hawk.....									B	B
Bradley.....									B	B
Breed.....									B	B
Crouch.....	B	B	B	B					B	B
Curtiss.....	B	A	B	A	B	A	B	A	B	A
C. V. S.....					B	B	B	B	B	B
De Luxe (1 cyl).....							B	B	B	B
De Luxe (2 cyl).....							A	Arc.	A	Arc.
Detroit.....							B	B	B	B
Detroit Bi-Car.....					B	B	B	B	B	B
Eagle.....									B	B
Electra.....									B	B
Emblem (1 cyl).....			B	B	B	B	B	B	B	B
Emblem (2 cyl).....					B	A	B	A	B	B
Erie.....	B	B	B	B					B	B
Excelsior (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Flanders.....									B	B
P. N.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Geer.....									B	B
Gerhart.....									B	B
Greyhound.....					B	A	B	A	B	B
Harley-Davidson.....	B	A	B	A	B	A	B	A	B	B
Haverford.....							B	B	B	B
Hilaman.....	B	A	B	A					A	Arc.
Henderson.....							B	B	B	B
Indian (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Indian (2 cyl).....	B	A	B	A	B	A	B	A	B	B
Iver Johnson.....									B	B
Kokomo.....									B	B
Majestic.....									B	B
Manson.....	B	B								
Marvel.....					B	B	B	B	B	B
Mayo (1 cyl).....	B	B								
Mayo (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Merkel.....			B	A	B	A	B	A	B	A
Minerva.....	B	A	B	A	B	A	B	A	B	A
Minneapolis.....					B	A	B	A	B	A
M. M.....	B	A	B	A	B	A	B	A	B	A
Monarch.....									B	B
Motorette.....									B	B
New Era.....			B	A	B	A	B	A	B	A
N. S. U. (1 cyl).....	B	B	B	B	B	B	B	B	B	B
N. S. U. (2 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless.....							B	A	B	B
P. E. M.....									B	B
Peugeot.....	B	A	B	A	B	A	B	A	B	A
Pierce (1 cyl).....			B	A	B	A	B	A	B	A
Pierce (4 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pope.....							B	B	B	B
Racyle.....							B	B	B	B
Reading Standard.....	B	A	B	A	B	A	B	A	B	A
Reliance.....	B	B	B	A	B	A	B	A	B	A
Royal.....	B	B	B	A	B	A			B	B
Schickel.....							B	A	B	B
Scott.....									B	B
Thim.....	B	A	B	A	B	A	B	A	B	A
Thor (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Thor (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Torpedo.....	B	B	B	B	B	B				
Triumph.....	B	A	B	A	B	A	B	A	B	A
Wagner.....	B	B	B	B	B	B	B	B	B	B
Yale (1 cyl).....	B	B	B	B	B	B	B	B	B	B
Yale (2 cyl).....					B	A	B	A	B	A

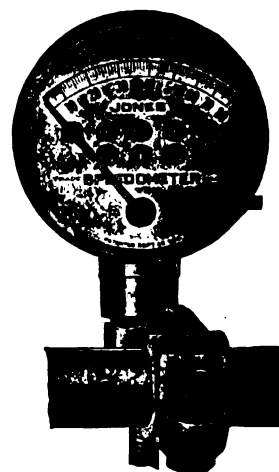
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General Sales Offices, 29 Broadway, New York City

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Read What Capt. Stiles of the Chicago Police Says About— **JONES SPEEDOMETER**



WEST CHICAGO PARK COMMISSIONERS

DEPARTMENT OF POLICE

A. J. STILES, Captain.

Chicago, June 21, 1912.

Jones Speedometer, Chicago, Ill.

Gentlemen: It is with great satisfaction that I have at last found a Speedometer that has proven under all kinds of tests to be almost absolutely perfect. I have tried all other Speedometers and was compelled to discard them, as they would not stand a test for accuracy; or, in other words, were merely a guess. In using the Jones Speedometers in my department, I can conscientiously say that we have found on no condition and under no circumstances the Jones Speedometer to be wrong.

Inasmuch as we are making a great many arrests for the violation of the State Vehicle Law, and with a disposition to be fair, I say again that it was a great consolation that we have found a Speedometer that we can depend upon. These Speedometers I test every day under a stop watch, and with a very few exceptions they are always accurate.

Yours very truly,
ARTHUR J. STILES,
Captain West Park Police Department.

Police officers don't guess—guesswork isn't valuable testimony. They take no chances with inaccurate speedometers. They use the instrument that's "geared to the truth," that's just as accurate on the hottest as on the coldest day. The instrument that is impervious to electrical influence. Mr. Motorist, the Police Departments in all the large cities use the JONES SPEEDOMETER. Better get in line.



CAPT STILES AND TEN OF HIS MEN.

THE JONES SPEEDOMETER.

Factory: New Rochelle, N. Y.

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Tandem Attachments

Model 2.



MODEL 25

This equipment may be put on in a few minutes and make an ideal passenger carrier. The weight of the extra rider is placed well forward, making it very easy for the driver to control the machine under all conditions. For the motorcyclist who desires an all-around outfit, here is the best and only one of its kind on the market. Built by motorcycle men who know. Model 25, complete, as shown, \$12.00. Model 25, less carrier, \$5.00.

Model 25.



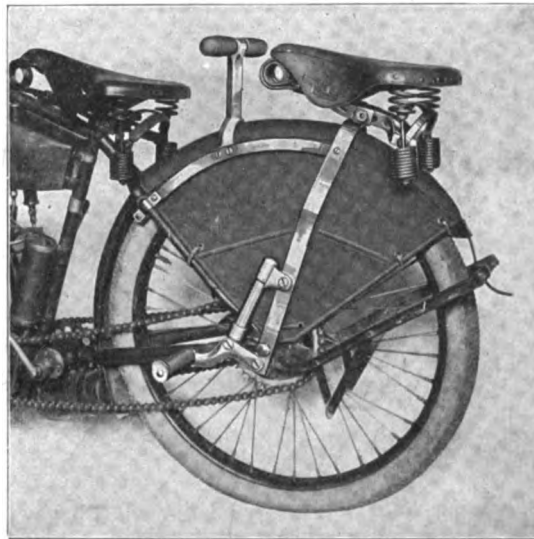
MODEL 2

Combined Luggage Carrier and Tandem Seat

Exceptionally strong and well made. Top or platform hardwood, with binding of $\frac{3}{4}$ -inch channel steel. The smooth flat top can be used with or without cushion. No rivets. Rear stay is one continuous arch of $1\frac{1}{4}$ x $\frac{1}{4}$ -inch spring steel. Top secured by malleable iron brace fitting over top of arch. Guaranteed to carry any weight axle will hold. Price, complete, highly-nickel-plated, \$7.00.

MODEL 47

The biggest value for the money ever offered. The luggage carrier is our Model 2, with the rear arch extended and formed into foot-rest. Cushion is our Style B, spring top, an extremely comfortable seat. Very light. Combination attachment, complete, with skirt-guard and spring top cushion, \$8.75.



Model 1.



It is readily and easily attached by the same screws or rivets that attach the clip spring to the mud guards, requiring no extra screws or bolts. No. 116, price, complete, postpaid, 50c.
Note—Clip not included.

Worthy Of the Name

Model 47.



MODEL 1

Readily attached to any motorcycle. Made of $1\frac{1}{4}$ x $\frac{1}{4}$ -inch spring steel. Non-breakable and non-twistable handlebar. Low, comfortable saddle position. Foot rests on spring pedals, well forward, whose wonderfully smooth action absorb all jars and assures the permanent foothold of the pedals. Model 1, price, complete, as shown, fully nickel-plated, \$15.00; without saddle, \$12.00.

Ero Stand Latch

The Ero stand lock not only does away with all soiled hands from locking and unlocking stand, but is a positive lock, preventing the stand from falling out on the road. Just press the trigger with the foot, when the stand will instantly drop out.

If the stand is lifted into position with a spring, it is then only necessary to press the foot, first upon the trigger to release the lock, and then follow the pressure down till the stand strikes the ground.

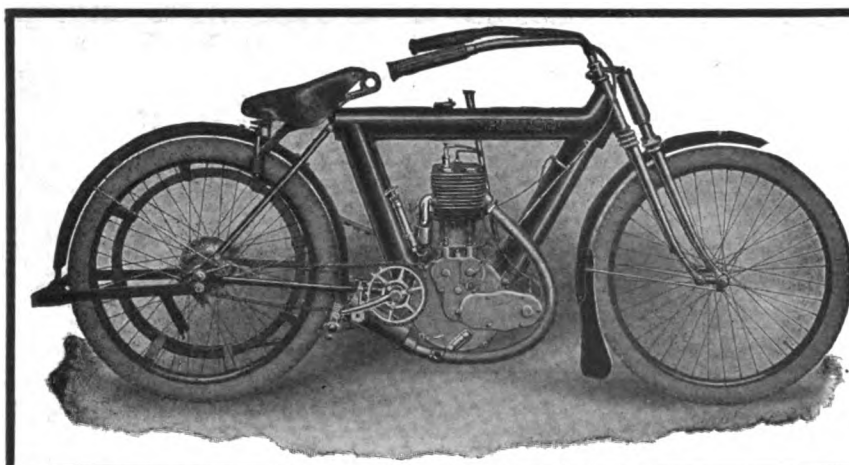
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ERO MANUFACTURING COMPANY

914 Jackson Boulevard, Chicago

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EVERY PIERCE RIDER MAKES THIS KIND OF A RECORD

Michigan City, Ind., July 29, 1912.

The Pierce Cycle Co., Buffalo, N. Y.
Gentlemen:

I have just completed a 250-mile trip to Fort Wayne and return with my model 12C Pierce single with side car attached, and the way the machine pulled the outfit through the sand and clay roads and steep hills which we encountered is little short of miraculous. Besides the side car and extra passenger I carried about 25 pounds of luggage making the total weight about 650 pounds.

The machine never faltered once on the entire trip and to say that I am well pleased with the performance of this model 12C would be putting it very mildly. I have covered over 4,000 miles so far this season without the slightest mechanical difficulty, and anyone who wants a reliable machine for power and endurance should select a Pierce.

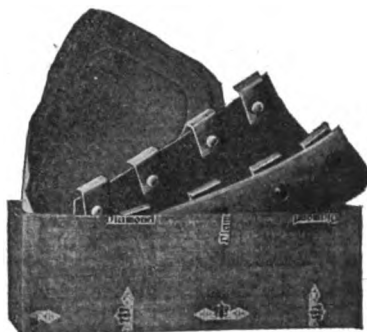
Very truly yours,

(Signed) JESSE E. EDSALL.

Agents Wanted

The Pierce Cycle Company, Buffalo, N. Y.

The
Motorcyclist's
Spare Tire



The
Only Practical
Device on the Market

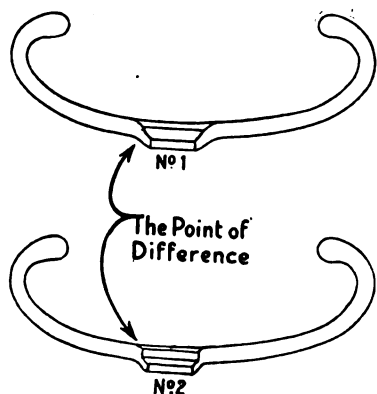
Diamond Tire Sleeve

No matter what the injury, it's all the same to the man who carries a Diamond Tire Sleeve. It can be applied to any part of the casing in one to three minutes. It fits inside and under the rim instead of over it as does the old lace sleeve. It holds a rim-cut just as effectively as it does a puncture. In case of a blow-out or any other injury that penetrates the fabric, the fabric blow-out patch which accompanies each Diamond Tire Sleeve is applied inside the casing to protect the tube. Both are neatly packed in an attractive box that fits conveniently into tool box or pocket.

SEND FOR OUR BOOK ON TIRE ACCESSORIES. IT'S WORTH HAVING

The Diamond Rubber Co. of N. Y., Akron, Ohio

SUBSIDIARY OF THE B. F. GOODRICH CO.



Mott Rims for Strength

THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

WRITE US FOR FULL DETAILS

THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

MOTT WHEEL WORKS, Utica, N. Y., Manufacturers

R. B. ABBOTT SALES CO., Sales Agents, Majestic Bldg., Detroit

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MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

FOR SALE.—1912 M. M. twin 8 h. demonstrator; fully equipped. Cost \$300; price \$200. C. W. Ballah, Bayard, Iowa.

FOR SALE.—Tandem attachment, saddle and bars; 26-in. wheel. Offer. George Egge, 60 N. Highland ave., Nyack, N. Y.

FOR SALE.—1912 Harley-Davidson twin 7-8 h., chain transmission. Complete with Prest-o-Lite tank, luggage carrier and tandem attachment. \$200. J. H. Kyte, Fanwood, N. J.

REAL BARGAIN.—Absolutely brand new 4-cylinder Henderson, with tandem seat, \$260; ship anywhere C. O. D. subject to examination. Holmes Wright, 361 Washington st., Newark, N. J.

BRAND NEW HARLEY with clutch and spring seat post; used about 400 miles; \$190. 1910 magneto. Excelsior; good condition; \$100. Magneto Flying Merkel, about 1910 model, tandem and lamp outfit, \$90. Indian battery, \$50. Excelsior twin, \$160. A. J. Henderlong, Crown Point, Ind.

MOTORCYCLE EXCHANGE.—Have a \$100 Victor talking machine, 111 records and a cabinet, all in very good condition. (Total value \$196.) Would like to exchange for motorcycle in good running condition. Write, giving all particulars, to "D" care of MOTORCYCLE ILLUSTRATED, 51 Chambers st., New York City.

FOR SALE.—Indian 7 h.; run about 160 miles; in good condition. All extras included. E. M. Kalteis, North East, Pa.

MOTORCYCLE TIRE BARGAIN!—A. C. C. A. prices talk! Diamond, Goodrich, G. & J. and other standard makes, guaranteed: Gridiron, Basket and Bailey Threads; 28 x 1 1/2, \$3.00; 28 x 2 1/4, \$5.70; 28 x 2, \$4.95; 28 x 2 1/4, \$6.20; 26 x 2 1/4, \$5.45; 26 x 2 1/4, \$6.20. Guaranteed. Tubes priced proportionately low. Shipped on approval. Don't buy until you receive our price list! The Automobile and Cycle Company of America, Dept. X, 1769-1787 Broadway, New York City.

WILL EXCHANGE.—High-powered wireless set complete for good serviceable motorcycle. Description mailed on request. Address E. L. Johnson, Locust Valley, L. I.

HAVE A \$100 VICTOR talking machine, 111 records and a cabinet, all in good condition, (total value, \$196.) Would like to exchange for motorcycle in good running condition. Write, giving all particulars to "D" care of MOTORCYCLE ILLUSTRATED, 51 Chambers st., New York City.

1912 INDIAN, 7 h., two-speed, Tourist Trophy model, 2 1/2-in. tires; blue machine, run once, 9 miles, and like new. Delivered July 25. \$295.00. "C. F. W." care of MOTORCYCLE ILLUSTRATED, 51 Chambers st., New York City.

\$25.00 REWARD.—Lost, 1912 Harley-Davidson motorcycle single; magneto; motor No. 2,450B; Illinois license No. 3,342. Perfection headlight; Atlas tail-light; generator; Star tandem carrier and Barco exhaust whistle. Address, Russell H. Perkins, 1632 W. Madison st., Chicago, Ill.

REBUILT MOTORCYCLES.—Great clearance sale. Prices reduced way below cost. Goods must be moved quickly for cash. Machines taken in trade for new M-M's. Indians, Curtiss, M-M's, and many others; singles and twins. Many as good as new and ready for instant shipment. Rare opportunity to get high-grade mount for very small investment. Send today for Bulletin No. 61. American Motor Company, 716 Center st., Brockton, Mass.

HAVE CAPITAL TO INVEST; want active partnership in established paying motorcycle business, preferably New York or vicinity. Partner, 1570 Broadway.

PATENTS

promptly obtained OR NO FEE. Trade-Marks, Caveats, Copyrights and Labels registered. TWENTY YEARS' PRACTICE. Highest references. Send model, sketch or photo. for free report on patentability. All business confidential. HAND-BOOK FREE. Explains everything. Tells How to Obtain and Sell Patents, What Inventions Will Pay, How to Get a Partner, explains best mechanical movements, and contains 300 other subjects of importance to inventors. Address, H. B. WILLSON & CO. Patent Attorneys Box 29 Willson Bldg. WASHINGTON, D. C.

A. C. C. A. PRICES TALK.—Endless variety; latest models, every make; Indians, Merkels, Harleys, M. M.'s, hundreds others; \$20 up. Every machine guaranteed five years. Freight prepaid. Largest and only illustrated catalog published sent free. The Automobile and Cycle Company of America, Dept. 1, 1769-1787 Broadway, New York City.

FOR SALE.—5 h. twin Indian; 1909 model, battery ignition, diamond frame, all new tires, condition perfect. Sell \$85. H. R. Saunders, 1015 Arch st., Philadelphia.

July 15, 1912.

MOTORCYCLE ILLUSTRATED,
N. Y. C.,
Gentlemen:

Kindly do not publish my last ad. in your magazine regarding sale of four cylinder Henderson. I sold my machine through your first publication.

And oblige,
J. W. COLLAMER.

MISCELLANEOUS

WANTED.—Superintendent for motorcycle factory producing a strictly high-grade machine. Must have thorough knowledge of motorcycle manufacturing problems and be especially expert on motors. Only high-grade man wanted. State previous experience fully. "B. H." MOTORCYCLE ILLUSTRATED.

WANTED.—Experienced assemblers and repair men. The Minneapolis Motorcycle Co., Minneapolis, Minn.

DEALER'S CARDS, Etc.

"BOB" BRAZENOR, "Specialist on Repairs." Brooklyn agent for Harley-Davidson. Parts for Excelsior, Indian, etc.; supplies. 1507 Bushwick avenue, Brooklyn.

B. & C. TWO-SPEED and free engine gears for chain-driven motorcycles of the counter-shaft type. Bushnell & Cannon, 1268 East 80th street, Cleveland, Ohio.

MOTORCYCLES.—Save dealers' profits; buy direct from the owners. I have all makes on my lists. Indians and Marahes from \$20 up. Hundreds of other machines at comparatively low prices. Get my prices before purchasing. M. I. King, automobile broker, 217 West 125th street, New York City.

THE LATEST AND BEST guaranteed Motorcycle Supplies at lowest prices will be shipped same day your order is received. You get satisfaction in every package. Write for largest Motorcycle Supply Catalog ever printed. Motorcycle Equipment Co., Hammondsport, N. Y.

T. J. SIXSMITH, expert repairing; agent for B.-S., Indian and Excelsior motorcycles. 208 W. 100th street, New York.

SECOND-HAND MOTORCYCLES.—75 of them, \$25 up; three tri-cars, \$125, \$300 and \$350, respectively; expert repairing, experimental work, aeroplane supplies. New York Motorcycle Co., Inc., 318-320 West 48th street, New York.

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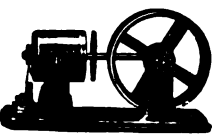
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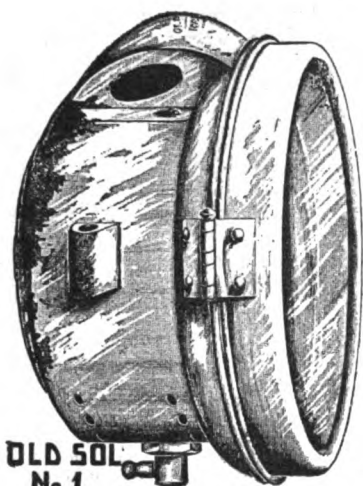
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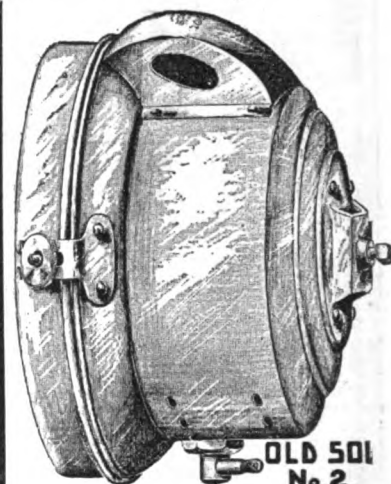
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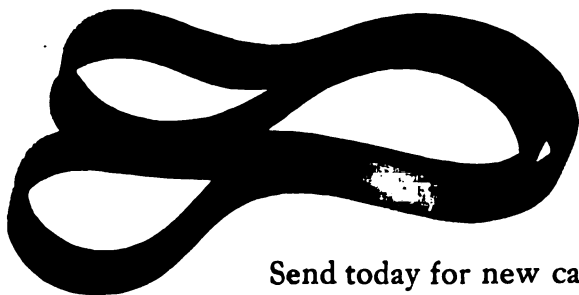
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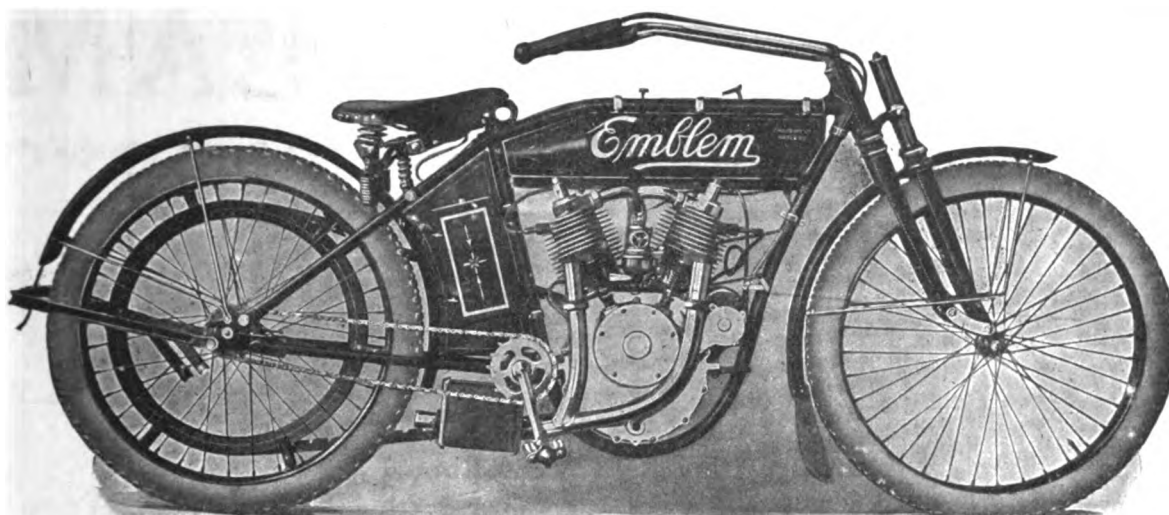
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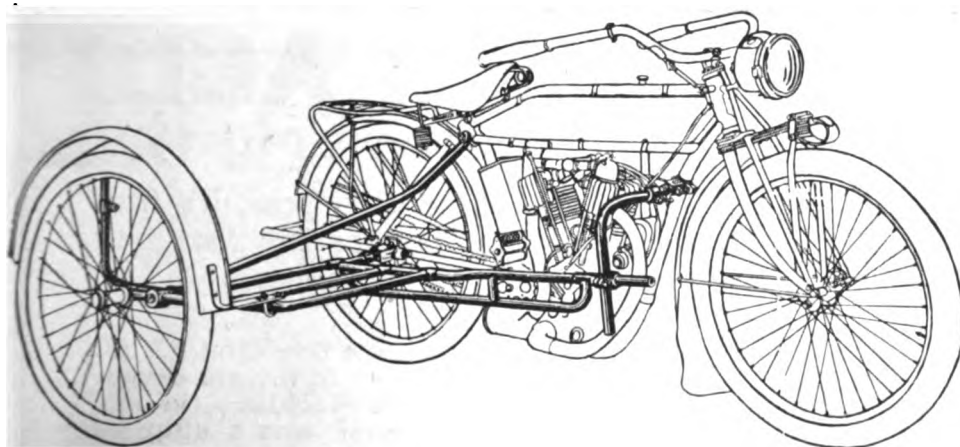
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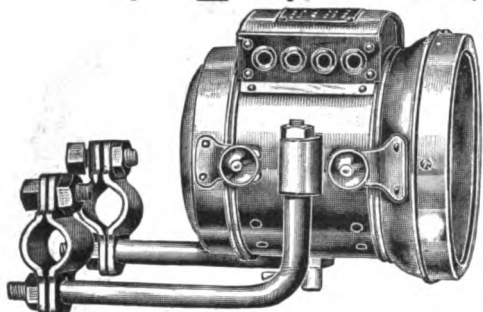
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P.E.M. LEADS THEM ALL!

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MILWAUKEE, WISC., June 8th—The P.E.M. took first in novice, first in Private Owner and Second for Stock Machines (In this latter event the winner was a stripped machine with a trade rider).

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stop for repairs?
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cycle that re-
sponds to your
every wish?

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full of energy?

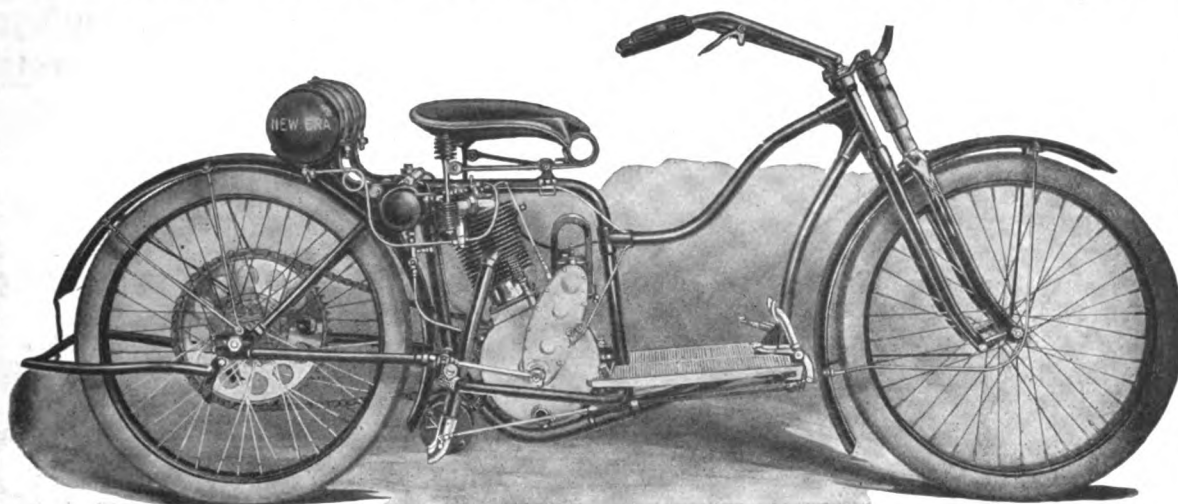
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motorcycle that
money can buy?

T We build machines for the man who requires all of these. Write for Agency proposition.

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And it will give you the same service as it does to these satisfied users

PROVIDENCE, R. I.

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GENTLEMEN:—Your letter of June 13 is at hand and contents noted. The Side-cars are becoming very popular here and a great many will be sold. Today is Tuesday and my men are now fitting a Majestic to an Indian motorcycle, and that's the second Majestic I have sold this week. I have no more in stock now, so please hurry deliveries on orders I have on file and at the same time ship me another Red Car for Indian machine. The Side-car I used for demonstration proved very handy to me during the time I have been moving to my new location.

One instance I will mention when I carried six men from old store to new building, two sitting in Side-car, one on saddle, one on rear carrier, one standing on each footboard of the T. T. Indian I use for Side-car regularly.

I am planning to take a Side-car over the roads to Columbus, Ohio, to attend the F. A. M. meeting, and I am looking forward to a very pleasant trip.

Yours very truly,
B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

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Worcester, Mass.

DEAR SIR:—Some time ago Waling & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

I am enclosing small photo of myself and lady friend taken in one of our city parks. You may keep this photo or tack it on a fence, or you can use it in your advertising.

I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

If you care to, you can fix it up to suit yourself and use it for advertising. It will be all right with me.

Yours truly,
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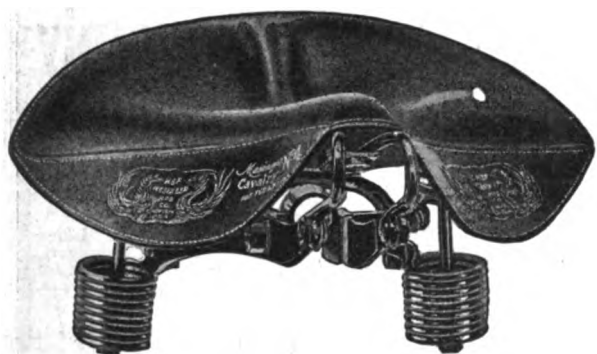
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Our tops are stretched when formed, not afterward. The narrow Pommel can only be obtained on Mesingers, which is the main feature in comfort.

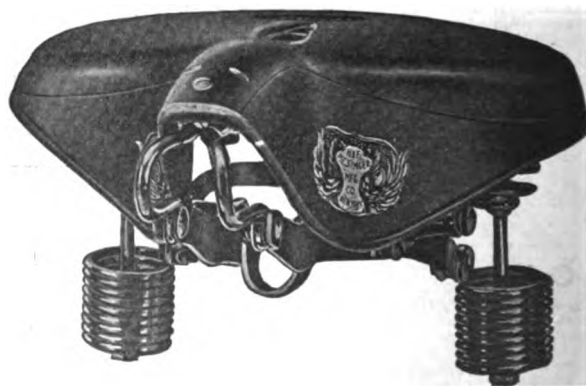
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*Give them
a trial.*

Corrugated
Tread

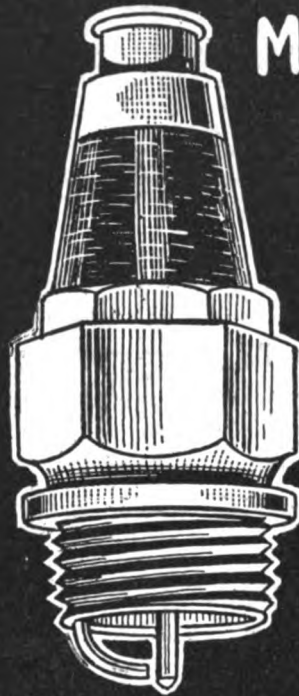
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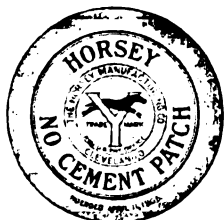
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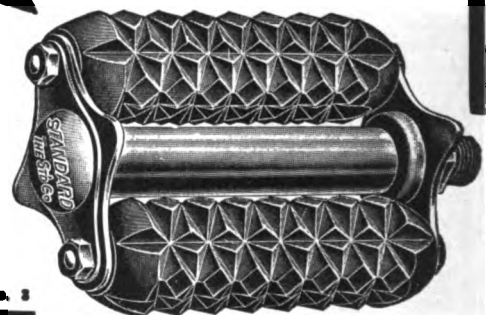
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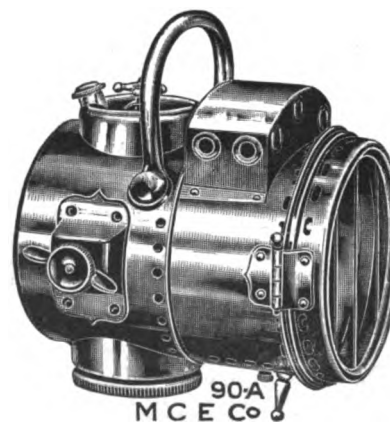
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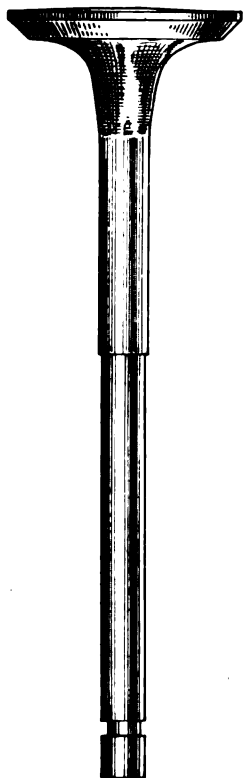
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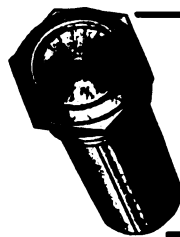
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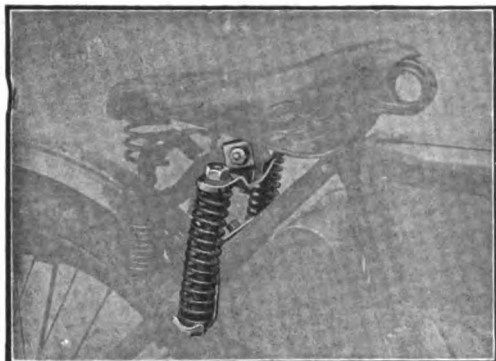
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The illustration shows the extreme simplicity and compactness of the New Barco Motorcycle Chime, and the ease with which it is attached to the machine.

The chime has three clear loud tones (copied after the Barco Automobile Chimes). The outfit is easy to operate and is made to fit any machine.

NO PARTS TO SHAKE LOOSE.

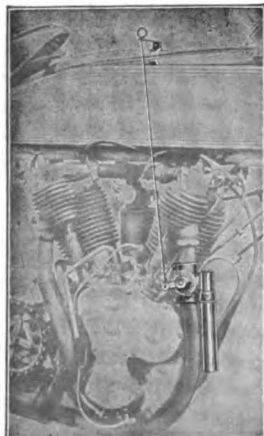
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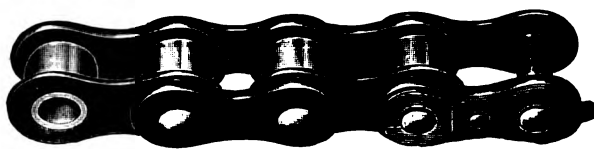
CHICAGO, ILL.



WHITNEY

Motorcycle Chains

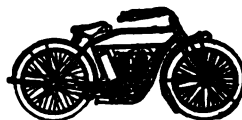
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are built for strains*

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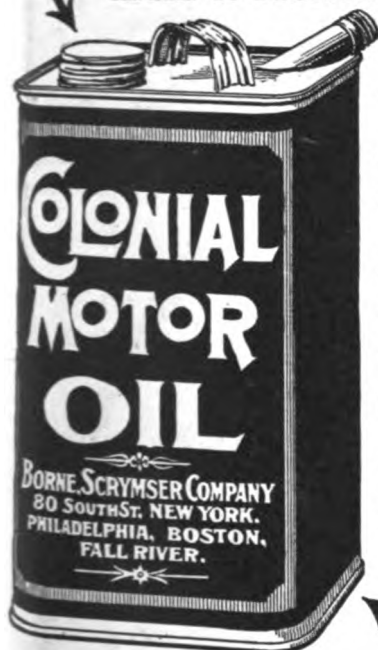
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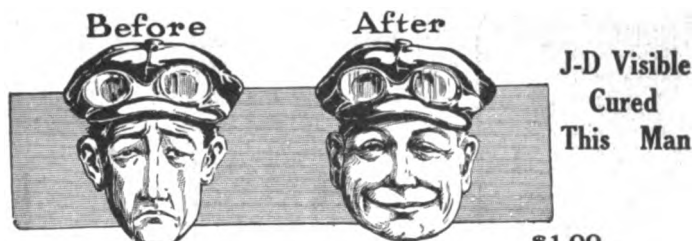
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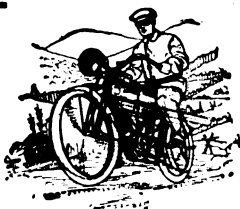
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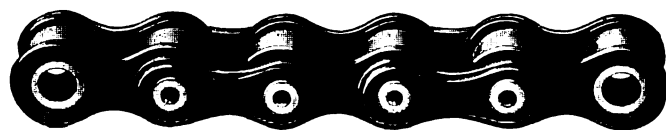
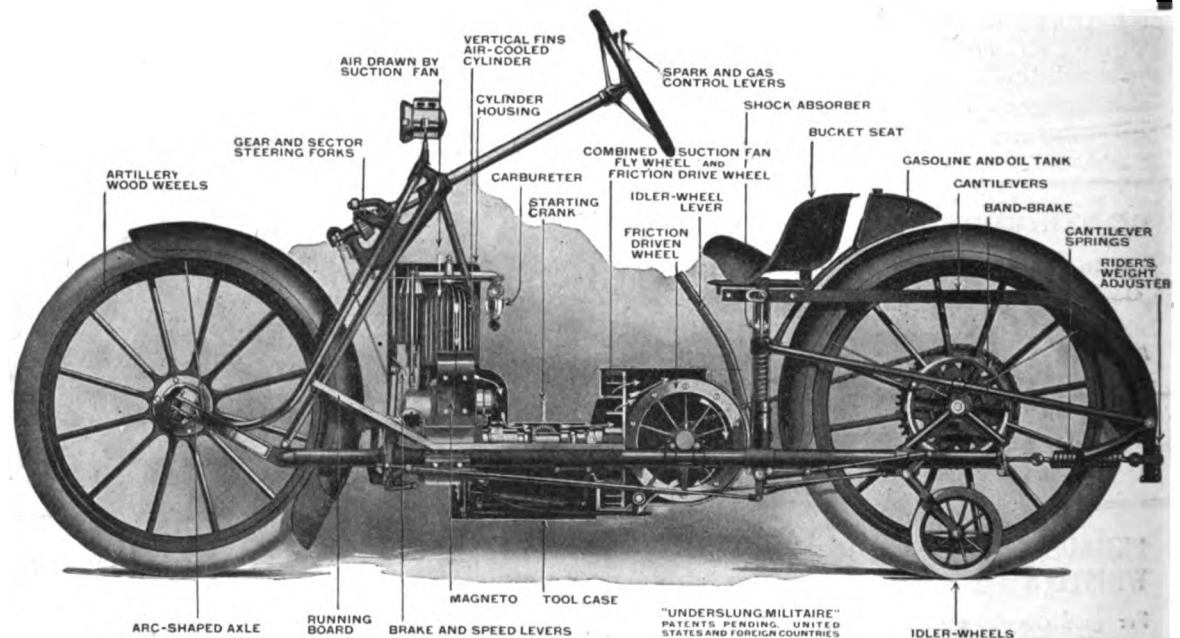
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That is the involuntary ex-
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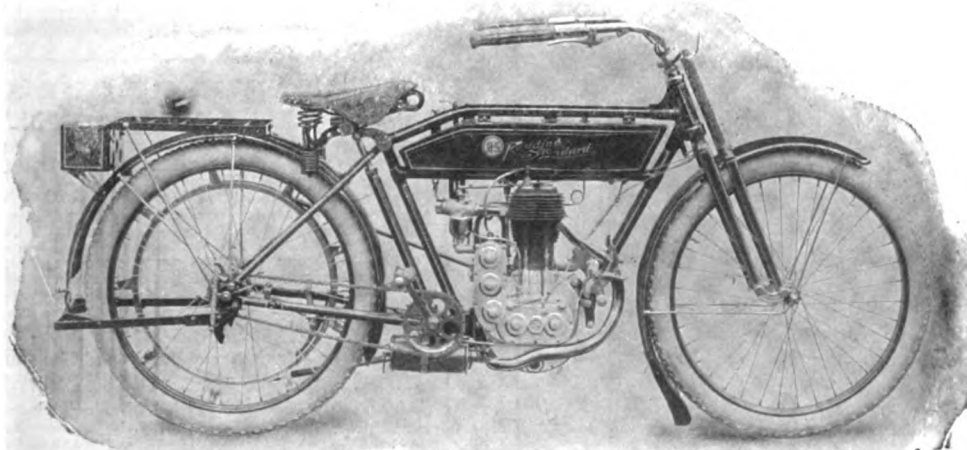
The graceful lines appeal to the lover of
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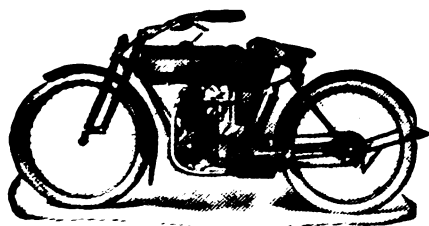


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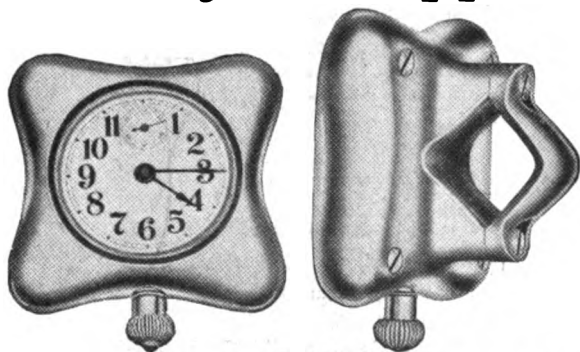
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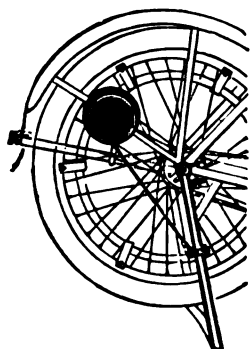
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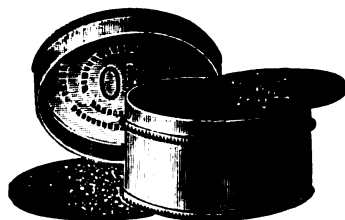
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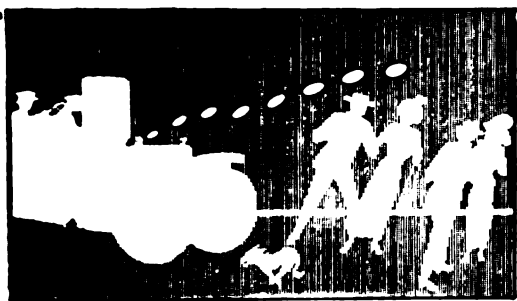
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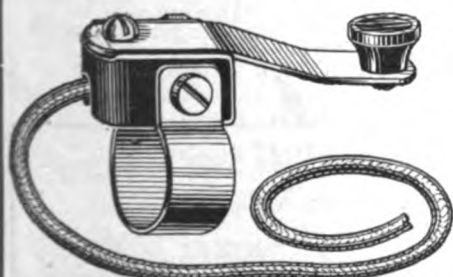
NATHAN KOVERAUL

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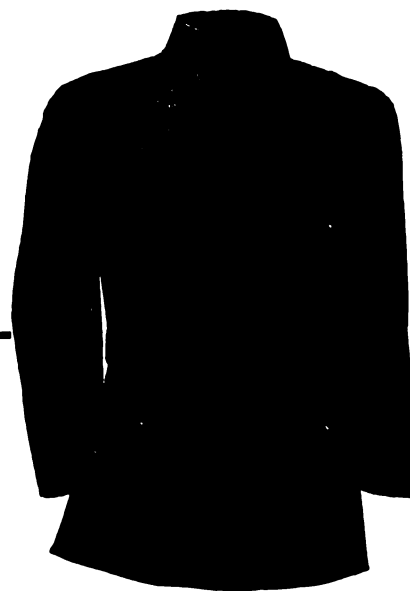


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**Strength in Every Fibre
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These motorcycle suits are cut to give a perfect fit, plus plenty of style and comfort. For service they are unequaled. They're the choice of the tourists and endurance riders.

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**HEITGER
Carburetor**

PERFECT CONTROL
From 1 to 100 Miles

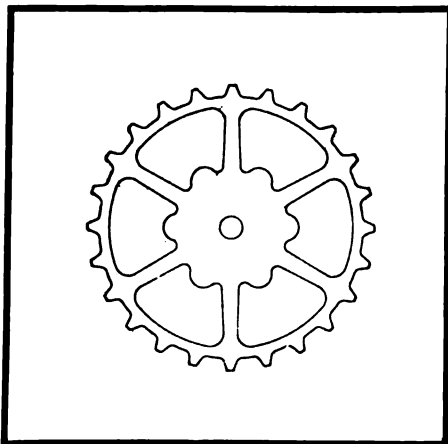
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More Satisfaction
More Economy

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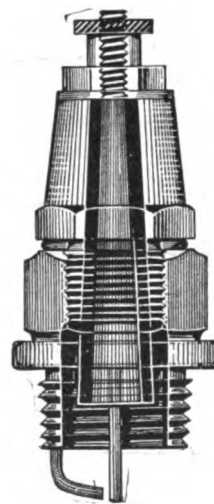
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Every part of which is made at
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**Specially constructed to withstand hard
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It adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.



Cut 3/4 Size.

Easily adjusted to any motorcycle.
Made for 24, 26, 28 and 30-in. wheels.

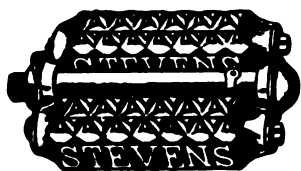
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Price complete with
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Also makers of Odometers, Tachometers, Counters and Fine Castings

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The Standard of the World.



THE STERLING.
Embossed handle, trade mark in gold.
15 ins. long, 1/4 in. dia.



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DANGER! Clear the Road!

The quick backward glance and the instant response
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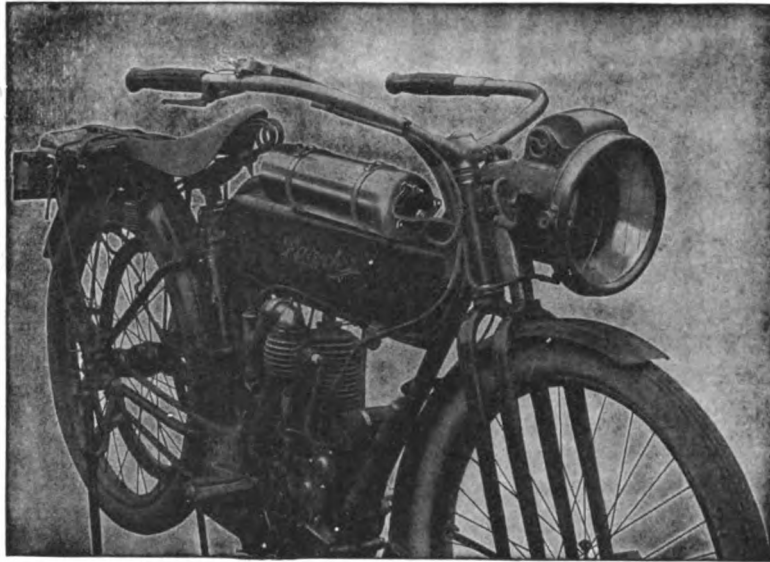
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the little horn with the enormous range. The demand
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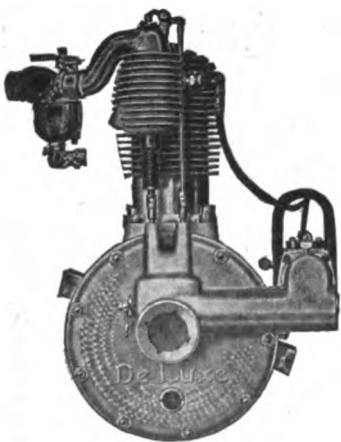


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Beautifully nickeled tank, 4 x 12 inches. User recharges it himself at cost of ten cents for 25 hours of white clear flame. Write for booklet and find out what users say about the CARBO-LIGHTS. Dealers' offer.

CARBO-LIGHT CO. - - ANDERSON, IND.

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NOTEWORTHY IMPROVEMENTS.

One piece crank shaft.	Simplified design throughout.
One part crank case with cover.	Reduced number of parts.
Improved cam and magneto drive.	Quiet running motor.
Oil tight motor.	Large Ball Bearings mounted in steel lined pockets.
Large Valves.	

Equipped with Bosch Magneto.

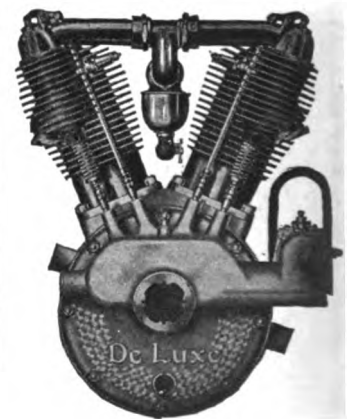
These improvements in design, together with the high grade materials used in construction, the modern methods of manufacturing applied, and the remarkable performance of these motors in road tests mark a revolution in motorcycle motor building.

FOUR SIZES

Four H. P. Single Cylinder	Five H. P. Single Cylinder
Seven H. P. Twin Cylinder	Nine H. P. Twin Special

PLAIN OR TWO SPEED MODELS. IMMEDIATE DELIVERY.
CONTRACTS SOLICITED.

PATENTS PENDING.



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**WOULD YOU PAY \$1.00
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delays, difficulties and expense resulting from these misfortunes?

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(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

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PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

A. SCHRADER'S SON, Inc.
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Get An Auburn Plug— *It Insures a Good Spark*

We are just conceited enough to claim that in the Auburn you will find the

*Most Efficient, Durable and Lasting
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**An Exhaust Horn with a Musical Tone
Warns Without Giving Offense
A Hair-Raiser When Needed**

There is absolutely nothing about Trinity Chimes to get out of order—no batteries or wire connections—and it never fails. It costs nothing to operate. It has four tones giving a perfectly-blended chord of pleasing harmony. Its warning always attracts attention.

It is an ornament to any machine. It sets up close to the three-way valve, which can be operated by either the foot or the hand. When the valve is released it automatically comes back into position for free exhaust.

Get the best horn at the lowest price.

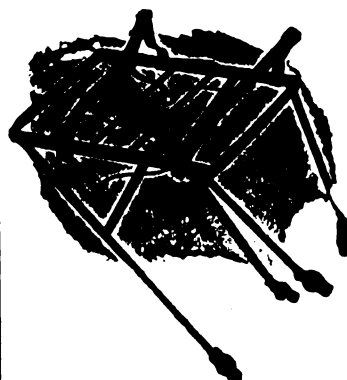
Every motorcyclist should have his motorcycle equipped with a Trinity Chimes.

Every dealer should carry Trinity Chimes.



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NEW ERA MANUFACTURING COMPANY
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THE "STAR" LUGGAGE CARRIER **\$3.50**

Universal Attachment for the Motorcycle—
Sold by the

Aurora Automatic Machinery Co., Chicago
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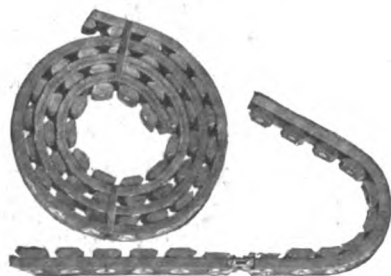
The Sign of a Good Belt

Is the sustained power that it transmits, together with great service and enduring qualities.

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You get all the qualities and character that are required for Perfect Transmission.

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SPARTAN "V" BELT.

A belt that produces exceptionally positive transmission.

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% Corbin Screw Corporation
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Dear Sir:-

*Since leaving Urbana, Ill.
June 10th I have ridden from there
to Boston Mass, all through
England, France, Switzerland and
Germany. In this sort of a ride
it is certain that I have ridden
up and down all manner and
description of hills and mountains
but never have I found a place
where my Corbin Brake was not
equal to the occasion. It
is always positive and absolutely
certain. It is all that anyone
could desire by way of an
efficient braking device.*

*Sincerely yours
John E. Hogge.*



CONTINENTAL- ERIE Motorcycle Tires

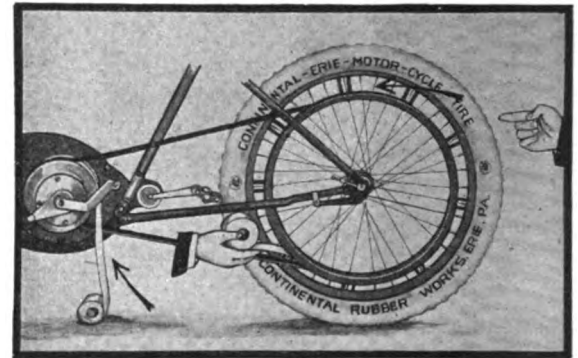
White Studded Tread

Are Built for Service

Continental-Erie Tires are made of the very best grade of Sea Island Fabric, Highest grade of Friction and have an especially Tough and Resilient Tread.

Continental-Erie Tires are made only by Tire Makers of long experience.

Specify Continental-Erie Motorcycle Tires when ordering your next machine.



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Non-Slip-Lag

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Doubles the life of the belt and adds
25% to the life of the machine

NON-SLAP-LAG is the new lining for pulleys. It absolutely prevents belts from tearing and slipping; increases their life and affords additional power. Non-Slip-Lag can be applied without removing Belt or Pulleys. No Screws or Metal Parts are required to hold Lag on Pulley. Non-Slip Lag is now being used exclusively by the Eclipse Machine Co., on the Eclipse Free Engine Pulley.

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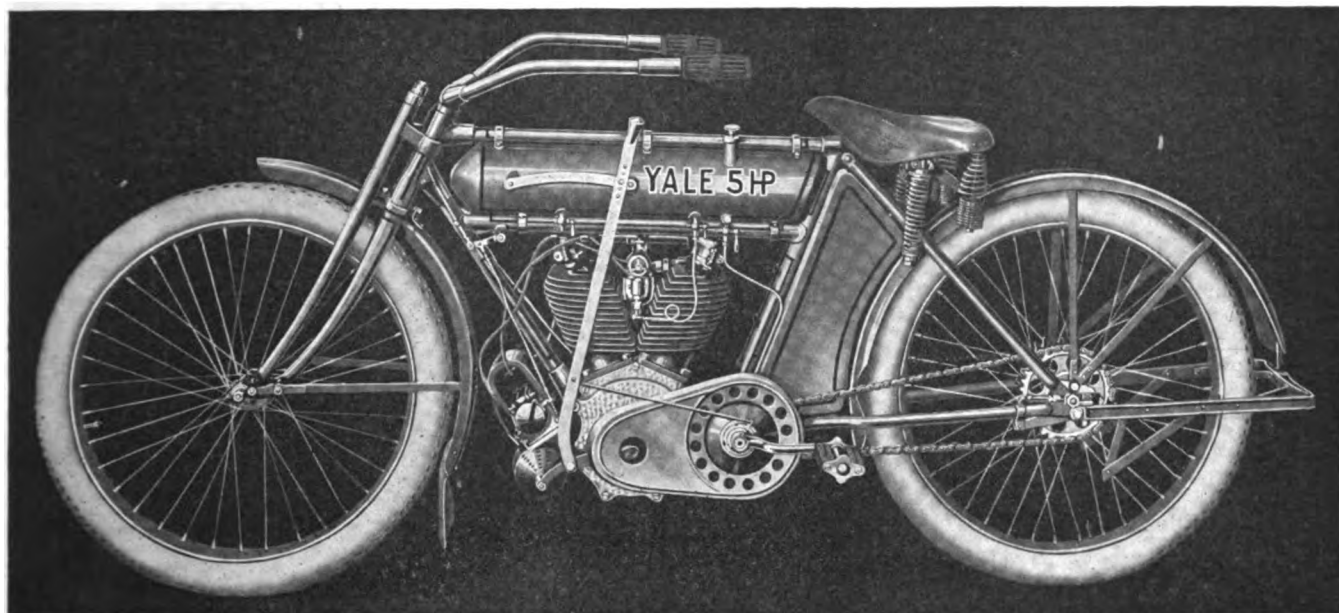
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Model 27, \$285.00

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YALE RELIABILITY is a recognized fact, attested to by hundreds of dealers and thousands of riders throughout the country. The world's record for endurance established by the YALE July 9th, 10th and 11th, 1909, remains unbroken. The record for low upkeep cost of operation made the same year has never been equaled. YALE Motorcycles are shipped same day order is received.

INVESTIGATE THE YALE

Singles and Twins—Belt Drive. Twins—Chain Drive.
Armored type Bosch Magneto, the celebrated Y-A Shock Absorber—original "jolt killer," 29 x 2¾" studded tires—10% oversize, regular equipment.
Immediate deliveries. Write to-day for literature.

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We also make Yale and Snell Bicycles, Hussey Handle Bars and Drop Forgings of every description.

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Are You "Afraid to Come Home in the Dark?"

Do you therefore stay close at home, or else creep in slowly, in fear and trembling?

If so, you are missing most of the joy of motorcycling. A **RELIABLE** source of light, with a lamp large enough, will make night riding pleasant and **SAFE**.

A gas generator won't fill the bill, because it is not reliable, and is also a troublesome nuisance. Neither will small generator lamps meet your requirements.

Prest-O-Lite is your **ONLY** source of satisfaction—the **ONLY** practical lighting system for motorcycles.

Floods the road far ahead with brilliant light, **STEADY**, unflickering under all conditions. Turned on and off like a gas jet.

Shows up the bumps, ruts, puddles, etc., as no other lighting system can do.

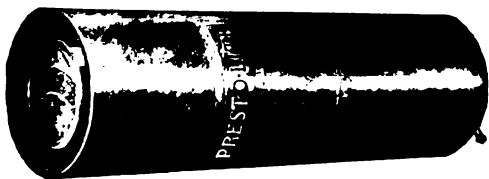
Wherever you may be exchange service may be had from one of our 20,000 dealers (motorcycle and automobile). We will arrange for prompt service for anyone, anywhere.

Expensive? Not at All!

Any experienced rider will tell you that Prest-O-Lite service costs no more—usually costs less—than the carbide a generator consumes.

Price of Tank \$10

(Equipped with gauge.)

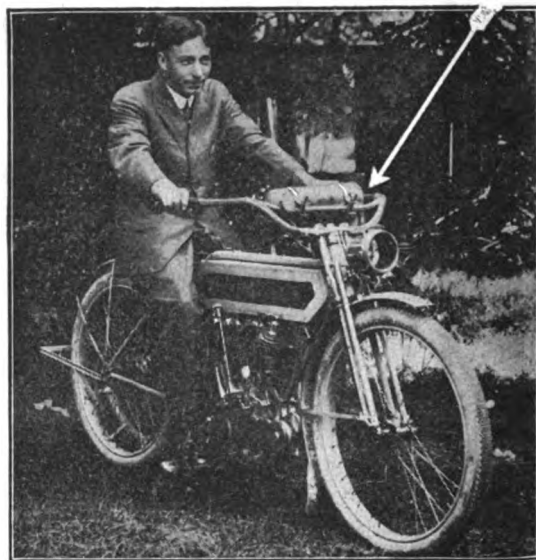


Dimensions: Length, 13¾ inches; diameter, 4 inches; weight, 8¾ pounds. 40 hours of light. Easily attached to any motorcycle.

MR. DEALER: It requires only a little effort for you to increase your Prest-O-Lite business. The plain **FACTS** about Prest-O-Lite, told to your customers, will make sales.

And don't get your customers into the habit of going elsewhere for Prest-O-Lite exchanges if you want to retain their trade on other things.

Prest-O-Lite Owners



Excelsior Motorcycle equipped with PREST-O-LITE.

Prest-O-Lite

MOTORCYCLE GAS TANK

And the money you invest in the tank itself is not **SPENT**, because a genuine Prest-O-Lite Tank never gets to be second-hand, is always in demand, and is always a **READY CASH ASSET**.

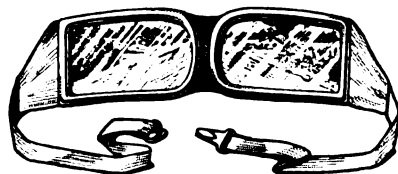
No rider can afford to be without this combined **CONVENIENCE, PLEASURE** and **INSURANCE**. One accident due to poor light might cost you more than a year of Prest-O-Lite service.

Don't Let Anyone Cheat You With an Imitation

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one **ANYWHERE** and **ALWAYS**. Imitations cannot. The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him! We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

The Prest-O-Lite Company 245 East South St. Indianapolis, Ind.

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service. **EXCHANGE AGENCIES EVERYWHERE**



The Roughest Roads Look Smooth to Riders of



AT least they seem smooth to the rider of the only spring frame and spring fork motorcycle. Two powerful springs encased in the rear stays and a hinged joint at the pedal crank axle, permit the rear wheel a play of four inches without change of saddle position. The "Flying Merkel's" remarkable comfort features, powerful ball-bearing motor and wonderful reliability have made the mount so popular, we've had to build a quarter of a million dollar addition to our already enormous plant to keep up with the demand.

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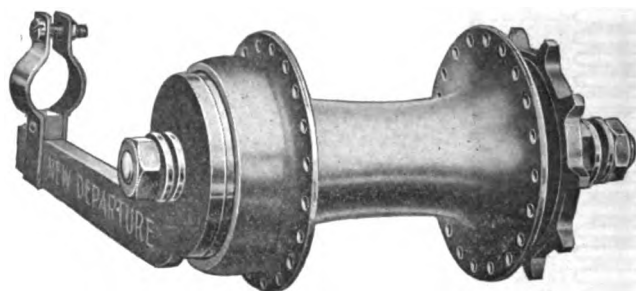
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NEW DEPARTURE

Motorcycle Specialties

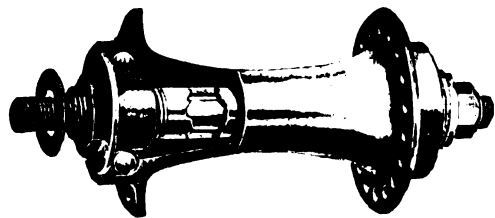
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and gives maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen 1/4-inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.

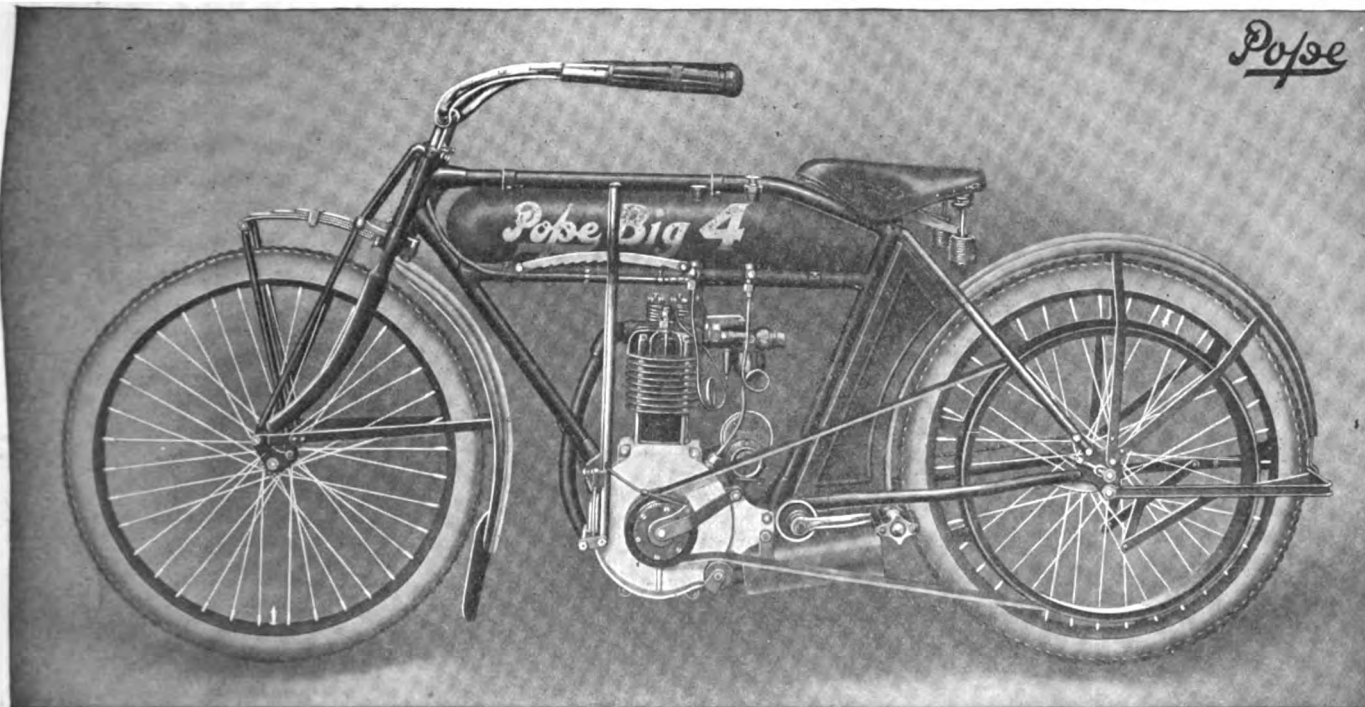


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THE NEW DEPARTURE MFG. CO., Bristol, Conn.

COASTER BRAKE LICENSORS

Powerful Speedy Reliable



Pope "Big 4," \$200 With Imported Magneto, Free Engine Clutch and Idler

NOTE THESE SPECIAL FEATURES—MANY OF THEM ARE EXCLUSIVE

OFFSET CYLINDER, eliminating a dead center, and giving maximum power at slow speed;

CYLINDER AND HEAD separately cast, preventing carbon deposits, and facilitating cleaning;

VALVES in the **HEAD** of the **MOTOR**, interchangeable and mechanically operated, securing a direct thrust and more power;

COMBINATION CLUTCH and **IDLER**, operated by one lever, giving perfect control of transmission;

POPE SPRING FORK;

MOTOR developing a big 4 horsepower;

FRAME with engine as keystone, giving low center of gravity.

THE POPE MODEL K combines all of the most desirable features of an up-to-the-minute motorcycle. Expert designers and skilled mechanics have produced in this model a motorcycle that is second to none. Thoroughly tried and severely tested, Model K has met the most exacting requirements ever imposed on a machine of similar size and style. In power and performance, in simplicity and durability, it is unequalled.

Don't Fail to Give the Pope "BIG 4" a Good Tryout
Send in Your Order at Once

Pope Model H, the \$165 Success

Model H is the leading high-grade, light-weight machine of moderate size and power—the one that has done most to popularize the sport of motorcycling.

It is a thoroughly reliable, road-worthy motorcycle—recognized everywhere by riders and dealers as the standard machine of its type.

Dealers! There Is An Immense Field for Pope Motorcycles

They are unquestionably the best all-round machines ever offered at anywhere near the price. Big opportunities in open territory.

If there is no Pope Dealers in your town, write us today. Send for Catalog

The Pope Manufacturing Company, Hartford, Conn.

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There it is —

my saddle—the saddle that has revealed to me the real value of a perfect saddle-service—the

BROOKS—

the only saddle that can embody the original and only genuine compound spring.

And you must learn by actual experience the value of that feature—it cannot be over estimated, and—it means "the roughest road vibrationless!"

J. B. BROOKS & CO., LIMITED
75 Criterion Wks., Birmingham, Eng.

Distributing Agents for U. S. A.—THE D. P. HARRIS
HARDWARE CO., 48 Warren St., New York.



The BROOK B170—
embodying the BROOKS
Patent Compound Springs;
seat part anatomically shaped,
and—you sit IN it rather than
ON it.

KOKOMO TIRES



KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, as proven by many tests is that Kokomo are

Low Cost
Durable
Efficient
Long Wearing } **TIRES**

*Literature sent upon
request.*

KOKOMO
RUBBER COMPANY

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Flanders
MOTORCYCLES

\$175

**At the
Factory**

While the Flanders "4" always gives an account of itself when entered in a race, it really is built especially for the road. And you can bank on a Flanders to give you the best possible service at all times and under every conceivable condition.

Before leaving the factory every Flanders "4" is put through a most severe test, insuring perfection in every detail. And when the machine gets on the road, we know that the service will greatly surpass even the expectations of the buyer.

The Flanders "4," whether for pleasure or commercial use, will always give the utmost service. It is reliability in itself, and if looking for a machine that will give absolute satisfaction at all times, the Flanders "4" is it.

At \$175 at the factory, the Flanders "4" is the best value on the motorcycle market. The machine is in every respect equal to others selling for \$50 more. But our facilities, our vast experience in building automobiles and motorcycles, make this low price for so high grade a machine possible.

A Postal Brings the Catalog

FLANDERS MANUFACTURING COMPANY

PONTIAC, MICHIGAN

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Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the Motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubes, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

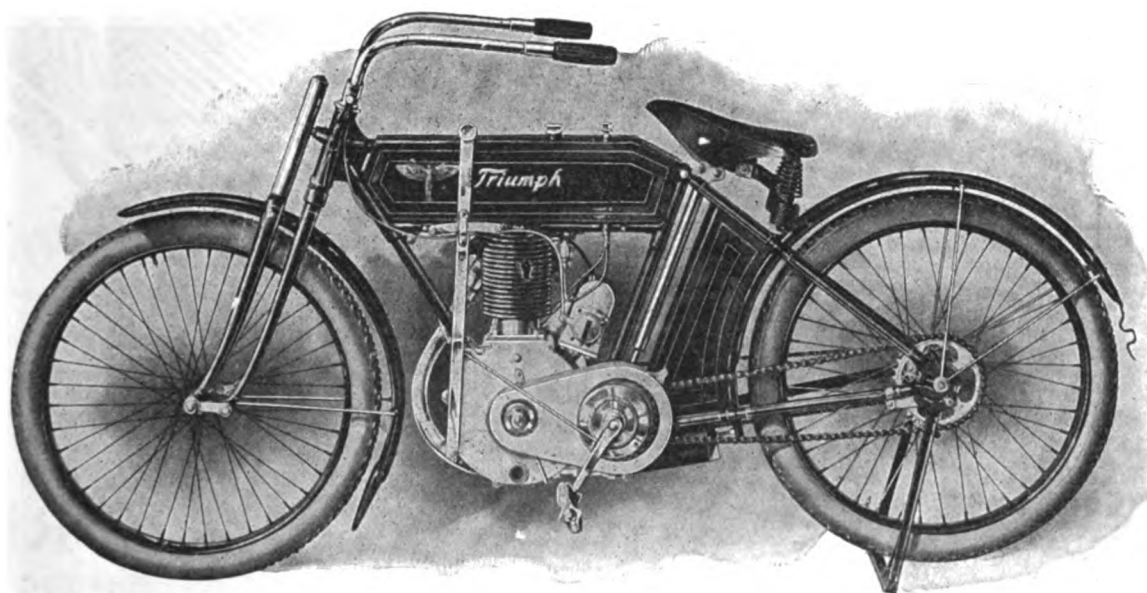
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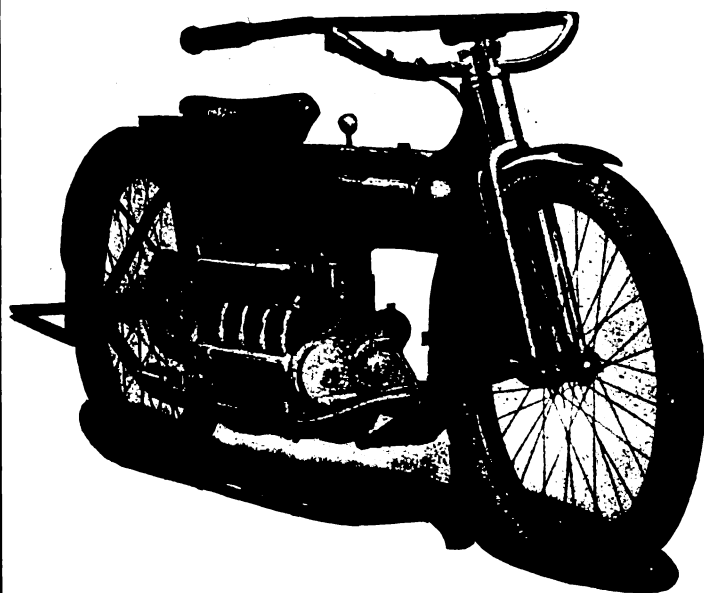
1913 Model Delivered NOW

"NOJOLT" makes the Triumph the smoothest riding Motorcycle on earth. That long stroke motor gives that power the rider now seeks.
Write today.

TRIUMPH MANUFACTURING COMPANY
51-55 East Woodbridge Street, Detroit, Mich.

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Power Without Noise Comfort; No Vibration



The Henderson—\$325

Note 4 cylinders (7 H. P.), footboard, absence of pedals, low saddle position and enclosed chain drive.

The Henderson incorporates the only real advancement that has been made in the building of motorcycles.

It saves you power without noise. Comfort, no vibration, because of its flexible, smooth-running four-cylinder motor, its low center of gravity, its footboard instead of pedals and its starting crank.

You should begin your investigation of the Henderson by calling on the local dealer, or writing us for his name and our catalog.

HENDERSON MOTORCYCLE CO.

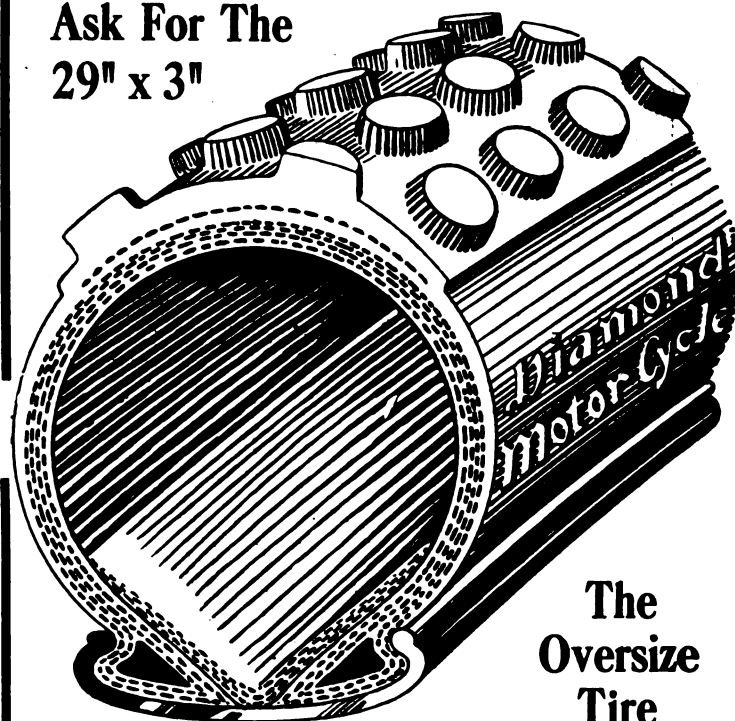
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DETROIT, MICH.

Diamond Motorcycle Tires

Ask For The
29" x 3"



The
Oversize
Tire

The 29" x 3" Tire Fits The 28" x 2½" Rim

Note the construction of this tire, the thick, heavy tread, massive, rugged buttons, and four plies of fabric and breaker strip.

It fits the 28" x 2½" rim perfectly—it can't rim cut.

It is the tire you have been looking for, and a Diamond tire at that.

Your dealer has them. If not, give us his name and we'll see that you are supplied.

SEND FOR OUR MOTORCYCLE BOOK

The Diamond Rubber Co., of N. Y.

Subsidiary of The B. F. Goodrich Co.

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INCREASE POWER

Motorcycle

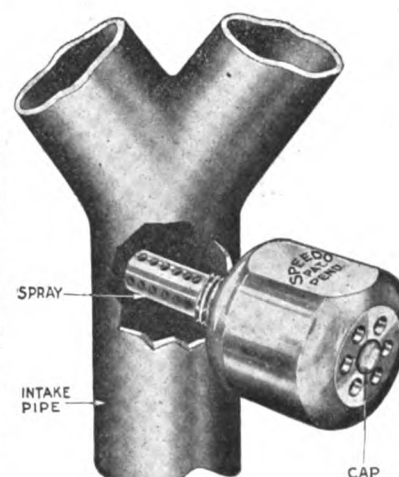
NOW READY

Speedo

IT'S GUARANTEED

A
Wonderful
Mechanism

Fits Every Motorcycle



ABSOLUTELY GUARANTEED:

1. To increase power 20%
2. To save 20% Gasoline
3. To Remedy Carbonization
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YOU will never know how perfect your Motorcycle can run until you try SPEEDO. It is as essential as the carburetor. Thousands already in use. Attached in five minutes on intake manifold. Breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. Automatically gives just the proper additional air your running speeds require. Passes you by the other fellow. Pulls you through sand and mud. Sails you over the hills. Small enough to be out of the way. Big enough to work wonders.



Your money is refunded if you are not pleased.
No dealer is authorized to sell otherwise.

Price \$2.00 Including

Decarbenizer

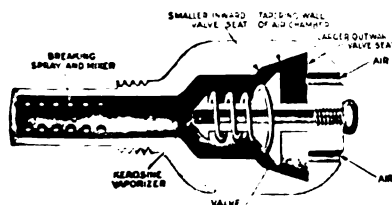
REMAND YOURSELF TO ORDER TODAY

See Your Dealer or Write

FULTON-McCUTCHAN CO.

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1149 Michigan Avenue
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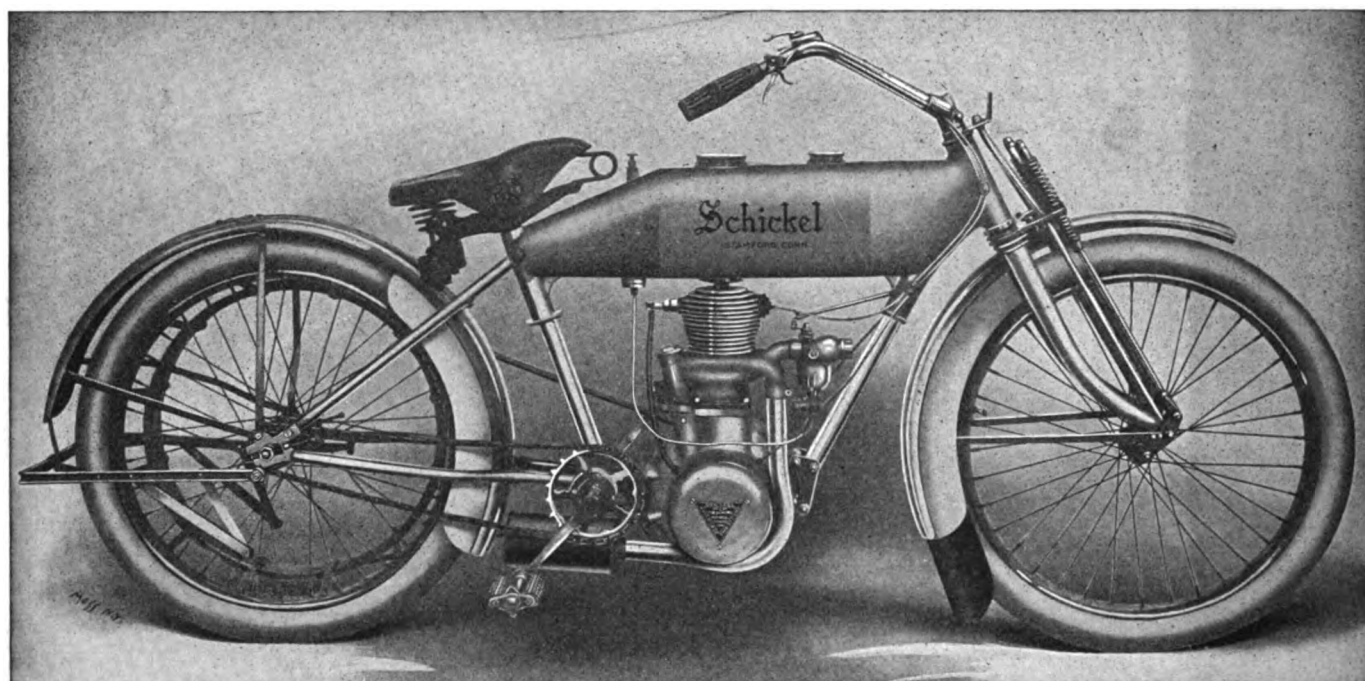
"It's the SPRAY that does it"

TEAR THIS OUT

If my Dealer hasn't Motorcycle SPEEDO, I will order one direct. I will state whether for single or twin. Amount, \$2.00 prepaid. Refunded if I am not pleased.
Fulton - McCutchan Co.
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YOU SHOULD KNOW



What Schickel Valveless Two-Stroke Means

Not so long ago the motorcycle rider was well satisfied with a mount that could show some speed and climb hills fairly well—these were the prime requisites.

Education has wrought some mighty changes in a short space of time and we find the average rider of today looking for something more than speed and ability to climb hills.

His request of today will be a demand tomorrow—his new mount must have power, but also it must be simple, silent, easy riding and attractive.

The Schickel Valveless Two-Stroke Motor

POWER

5 H.P.—\$225

SIMPLICITY

Only 3 moving parts with large bearing surfaces make up the entire mechanism of the motor.

The Schickel oiling system lubricates perfectly without the use of gears, pumps, sight feeds, pet cocks or separate oil tank.

SILENCE

There are no valves to break or bang shut in a Schickel motor.

There are no gears to set up an incessant and annoying rattle.

SMOOTH RUNNING

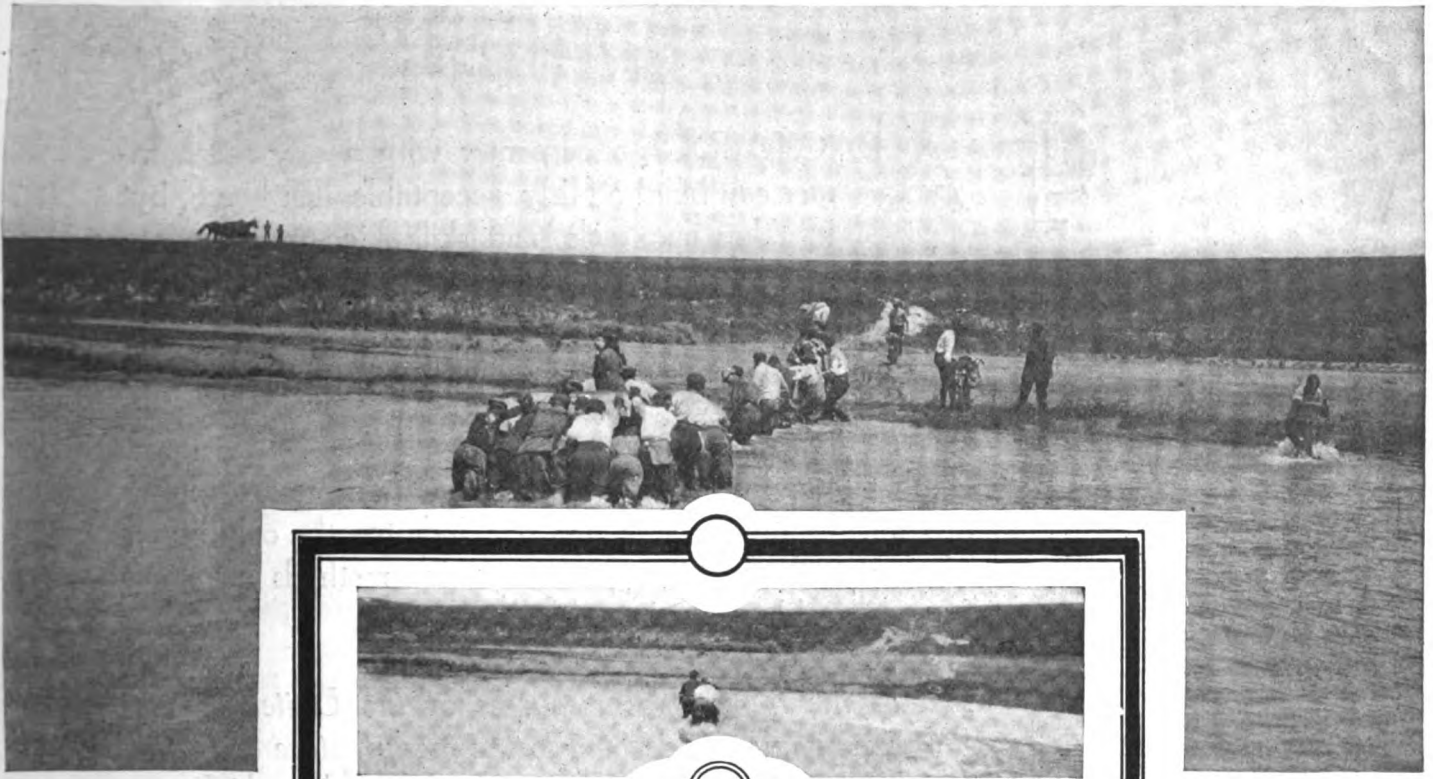
The Schickel motor delivers a power impulse to each piston stroke. The flywheel is given a running balance and this results in an almost total lack of vibration at all motor speeds.

Schickel Valveless Two-Stroke Means—Power-Simplicity-Silence-Smooth Running

Dealers who have felt the sting of keen competition are invited to open correspondence with us.
Write today for literature and further information.

The Schickel Motor Company 59 Garden Street, Stamford, Conn.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



The Kansas Short Grass Tour—Fording Smoky Hill
River—Snapshots of Busy Tourists



Q A BACK-WOODS carpenter with a saw and hammer can build a fairly acceptable hen house, but it takes fine tools and skillful co-operation to build a sky-scraper. Which only serves to emphasize the important fact that the *big* things, *real triumphs* of the modern world, are accomplished through co-operative effort.

It, therefore, isn't surprising that in the present highly developed state of the motorcycle industry the only brand of tires produced through co-operative methods of manufacture should predominate.

All of the tremendous resources of the United States Tire Company are devoted to the manufacture of ONE SUPERIOR BRAND OF TIRES, which are not only co-operatively made, but co-operatively tested as well.

United States Motorcycle Tires represent the combined producing facilities of four of the most magnificently equipped and most expertly operated tire factories in the world. Four separate corps of tire specialists direct their manufacture. They combine all of the tried and proven service-qualities of two brands of motorcycle tires, each of which was years ago recognized as a standard of quality.

In tires made as the United States Motorcycle Tires are made there is co-operation in actual manufacture, co-operation in methods governing manufacture, and, co-operation in assembling the individual features going to make up the aggregate of service-yielding qualities in each tire.

It is inconceivable that tires so made should not render the maximum of mileage service at the minimum of final cost.

UNITED STATES TIRE COMPANY
NEW YORK
Dealers Everywhere

VOL. 7

MOTORCYCLE

ILLUSTRATED

NO. 17

AUGUST 22, 1912

RAIN HAMPERS SHORT GRASS TOURISTS

A Series of Deluges Turned Roads Into Quagmires—Better Conditions in Colorado—Fifty-two Riders Left Garden City

COLORADO SPRINGS, Colo., Tuesday, August 20.—The Short Grass Tourists, who left Denver this morning, spent the day here sight-seeing.

THE third annual tour of the Short Grass Motorcycle Club, with fifty-two starters, left Garden City, Kansas, on August 11. A severe rain and hailstorm, which swept over Garden City and vicinity, causing several washouts and making it almost impossible to get over the roads, kept at least fifty more starters from joining the tour. The first rider left Garden City at 6:50 a. m., which was fifty minutes behind schedule time. The weather was ideal for the first two hours, but on leaving Scott City, Kan., a seemingly endless desert was encountered, and it was expected at any time to see one of the riders tumble over, so intense was the heat. About two hours after leaving Scott City the party reached Smoky Hill river, which was found to be two feet deep. There being no bridges, it was impossible to ride across, so off came shoes and stockings and the entire party waded across, carrying their machines. The nine accompanying autos were pulled across by a team of mules and about twenty-five riders. The roads were very rough

between Smoky Hill river and Oakley, Kan. Dinner was served at the latter town.

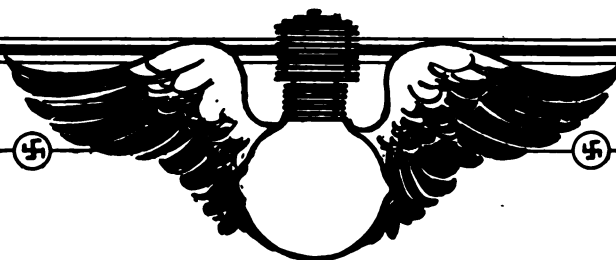
The desert, as viewed by the tourists from a high hill just before reaching Smoky Hill river resembled very much a lake where nothing but horizon can be seen.

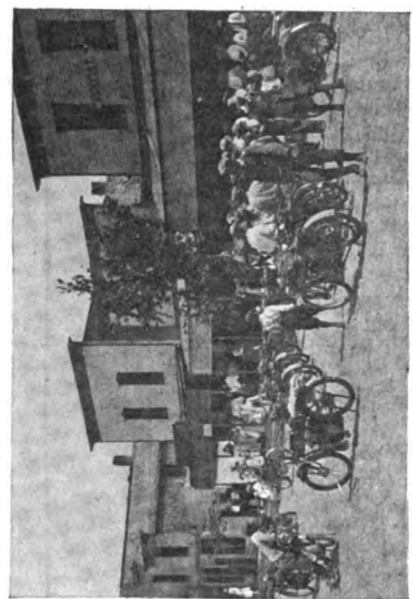
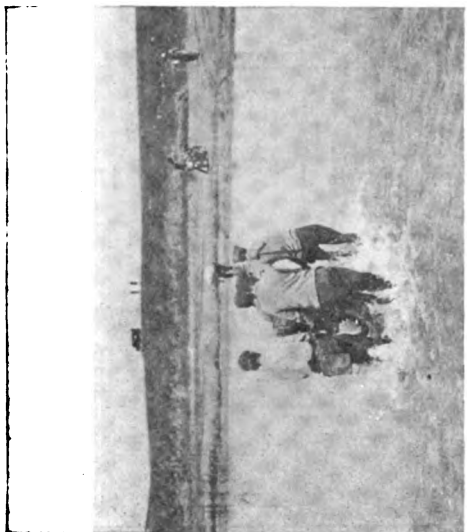
Smoky Hill is well known, as it is the historical place where the Smithsonian Institute has gathered many relics of petrified specimens.

The party left Oakley at 7 a. m. and was escorted by a number of the local boys, as a detour had to be made on account of the many washouts. The next stop was made at Colly, Kan., where several new riders joined the tour. After a short stop the procession headed for Atwood, Kan., where they stayed over night. Roads still very poor. The second day the tour left Atwood, Kan., at 9 a. m., the delay being caused by Dr. Patterson going fifty miles to see his sick father.

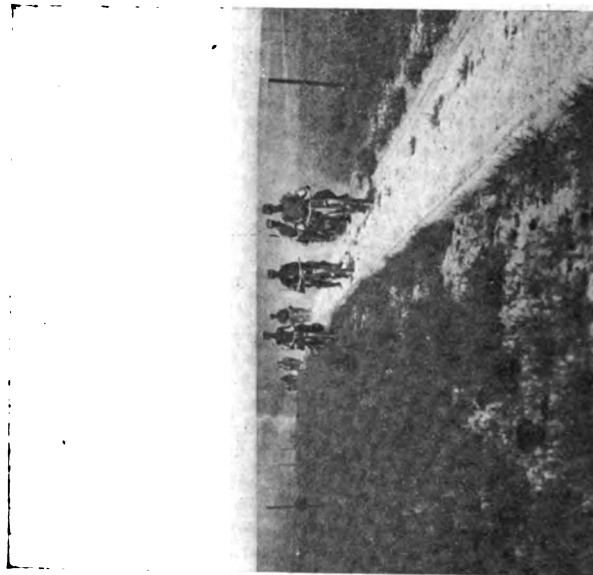
The tents and other paraphernalia, shipped to Atwood by train, arrived O. K., but could not be taken away, as the truck which was to be used could not be located, having been stalled somewhere. The roads were full of sand and ruts.

At Stratton the Harley-Davidson baseball team defeated the locals, the score being 8 to 6. The rest of the party did not wait to see the





Photographic Story
of the
Kansas Short Grass Tour



game, but kept moving till they reached Waneda-on-the-Lake, where they ate dinner. The ball players followed later and arrived at Imperial, Neb., where they were beaten by the Imperials; score, 7 to 4. Races and ball game over, the tourists lost no time in getting to bed.

They left Imperial at 6:15 a. m., bound for Julesburg. The road between Imperial and Samar, a distance of twenty-five miles, was practically unridable; however, the boys were determined to make it at all hazards. The ruts were eighteen inches deep in some places. Reed Pitcher, of Kansas City, Mo., riding a 4 Indian, dislocated his right foot, and was forced to discontinue his trip and go by train to Kansas City. S. C. Rosenberg, of the Harley-Davidson crowd, also had a bad fall, which opened his face about two inches under his left eye and strained his left shoulder. It was sheer grit that enabled him to ride from Samar to Holyoke, where a doctor dressed his wound. He then shipped his machine back to the factory and continued the tour by train.

The tourists arrived at Julesburg at 11 a. m. Here the Harley-Davidson ball team was again beaten. Next on the program was an auto



Charles Fuller Gates, one of the Tourists.

race between a Hudson 30, driven by one of the tourists, and a local Ford. The Ford car went dead in the fourth mile.

At 2:30 the tourists left Julesburg for Sterling, Colo., a sixty-mile run. The first division reached Sterling just ahead of a heavy rain storm, which lasted three and a half hours. The less fortunate ones had considerable trouble in getting in at all. With the exception of one car, none reached Sterling that night after the first division, which arrived at 6 p. m. The first of the stragglers appeared at 8 o'clock the following morning, but the last one did not reach town until 11:30 a. m. Several of the company had to sleep in a barn and others in a farm house, while the rest managed to reach Iliff, a small town about fifteen miles from Sterling. Farm wagons were kept busy for six hours, as it was impossible to ride after the rain. Several of the autos came near going into the ditch on account of the slippery road conditions. The Sterling people had a nice dinner ready for the tourists, and it was held over till the next night (Wednesday), on account of their late arrival. Wednesday was an enjoyable day for both the tourists and the Sterling inhabitants. They had some interesting races and a ball game,

which was won by the local club; score, 3 to 2. At 9 p. m. all enjoyed a dance with the Western girls. The only thing lacking to make it a real Western dance was the fact that it was held in a dance hall instead of a barn.

The Starters.

The starters from Garden City were: Geo. Puls, Milwaukee, Wis.; Martin Hausen, Beloit, Kan.; W. R. Gaines, Beardsley, Kan.; M. G. Bennett, Haviland, Kan.; E. C. Griffith, Haviland, Kan.; Arch. Baumenter, Haviland, Kan.; P. C. Harrier, Netawaka, Kan.; R. Silvester, Garden City, Kan.; E. I. Gully, Haviland, Kan.; R. Buchanon, Kiowa, Kan.; Will Holcomb, Atwood, Kan.; W. W. Kinsley, Jamestown, Kan.; D. C. Wildman, Tork, Neb.; C. Godin, Springfield, Mass.; Sam Chubbuck, Toledo, O.; R. V. Snud, Burlingame, Kan.; C. S. Miner, Burlingame, Kan.; John Hopkins, Burlingame, Kan.; S. C. Rosenkranz, Milwaukee, Wis.; D. Morrell, Otega, Kan.; T. E. Maxwell, Bellevue, Kan.; T. J. Overstrew, Kiowa, Kan.; L. A. Dressell, Topeka, Kan.; R. M. Perkins, Lawrence, Kan.; Clem Perkins, Lawrence, Kan.; Harry Burns, Kiowa, Kan.; H. H. Billeman, Kiowa, Kan.; Chester Crowe, Kiowa, Kan.; W. H. Knaw, Beloit, Kan.; Mrs. W. H. Knaw, Beloit, Kan.; A. T. Naylor, Salina, Kan.; E. Keller, Topeka, Kan.; S. W. Bechey, Salina, Kan.; C. E. Huft, Oronoqueks, Kan.; M. E. Evans, Beloit, Kan.; Mrs. M. E. Evans, Beloit, Kan.; G. A. Secrisn, Kansas City, Neb.; R. L. Seuvey, La Fayette, Kan.; Reed Farrell, Arkansas City, Kan.; V. B. Clements, Haviland, Kan.; Roy Bowser, Milwaukee, Wis.; J. C. Green, Lamar, Mo.; Wells Bennett, Wichita, Kan.; Emma Toff, Pratt, Kan.; Claude Stone, Smith Center, Kan.; Wm. Braitsche, Wichita, Kan.; Ellis Pitcher, Kansas City, Mo.; A. F. Cross, Capt., Eldon, Mo.; Inez Patterson, Pratt, Kansas.; R. J. Keyser, Wilson, Kan.; R. M. Hawk, Bluff City, Kan.; H. L. Jamison, Fainsworth, Kan.; C. F. Gates, Los Angeles, Cal.; F. Clayton, Danville, Kan.; L. Oliver, Danville, Kan.; C. N. Day, Danville, Kan.; E. F. Drouhard, Pratt, Kan.; C. W. Bailer, Thor, Dayton, O.; Wm. Stranahan, Harper, Kan.; G. Drouhard, Pratt, Kan.; A. Goodholm, Lindsborg, Kan.; H. G. Schiff, Colorado Springs, Col.; F. E. Stratton, Colorado Springs, Col.; Geo. P. Bartlett, Colorado Springs, Col.; A. W. Stevens, Denver, Col.

TOUR SIDE-LIGHTS.

SEVERAL tourists, led by Roy Bowser, voted to grow small mustaches in recognition of the Short Grass Motorcycle Club.

SEVERAL accidents were caused by ped- als catching in the sides of deep ruts.

MISS INEZ PATTERSON, sixteen years of age, deserves credit for her excellent riding. She went through spots which the best riders failed to make without a spill.

THE occupants of the Goodyear Tire Car, in charge of H. S. Quinn, of the Goodyear factory, and Edw. E. Flippen, Jr., manager of the Kansas City branch, and driven by Geo. L. Schofield, Kansas City manager for the American Automobile, had their hands full. They not only gave out tubes and casings, but never passed a rider on the road without giving him aid. The car is an American "Thirty," and a

four-passenger, but at times it carried as many as seven and enough motorcycle parts to build an entire machine. Mr. Schofield is somewhat of a motorcycle enthusiast, as he was connected for several years with E. H. Dowd, who is now managing the Armac Motor Co.

P. E. ZIMMERMAN, manager of the P. Hagstrom Bros. Mfg. Co., of Lindsborg, Kans., was on hand at Garden City with a full line of spark plugs, pennant holders and inner tubes. He went as far as Oakley.

IN the Marmon car were Louis M. Tower, secretary and general manager of the McQuary-Tower Manufacturing Company, of Lawrence; Clem Perkins, treasurer of the firm, and his brother, R. M. Perkins. The official uniform of the club was supplied by this company. The officers' apparel is of imported gabardine and that of the regular riders of government shelter cloth. The car is decorated with khaki advertising banners and a clever tag showing the route is distributed at every stop. The M-T car has battled with bad roads from the morning of the start from Lawrence in a driving rain. From Toledo to



Amateur Race at Sterling.

Salina they took the Golden Belt route, which in dry weather is excellent, but after an all-night rain was taken on second speed most of the way. Salina to Hutchinson on the Meridian road was dry and speedy, but to Dodge City the road was muddy and rough, and worse than that between Dodge City and Garden City. Five bridges were washed out and mud holes were continually encountered. This was on the south side of the Santa Fe; on the north side roads were better, although a cloudburst had washed down the hills, making gullies in the road and mud holes for miles that necessitated detours through pasture-land.

Out of Garden City the M-T car was delayed waiting the arrival of club express matter, and left there hours behind the riders, headed for Atwood. The roads were smooth as a floor and the big Marmon hit only the high places.

At Smoky Hill River the car stuck in mid-stream owing to the springs being down flat with express packages. Assistance finally came in the shape of a spring wagon drawn by two husky horses, and after three hours tugging, with four men at the wheels, the car proceeded on its way, making a mile detour over hills, on account of mud holes, into Colby at 10 p. m., central time.

TOURISTS REACH DENVER.

THURSDAY, August 15.—The tourists left Sterling at 7 o'clock this morning after having had a good rest. Rain the previous night made road conditions very bad. When wet, western roads become miry, or what is termed gumbo, which is worse than mud, as the water remains on the surface.

Behind schedule in Cheyenne, but in time to see a real Wild West show.

A rain storm which came up just before the travelers reached Cheyenne made it necessary for some of the party to sleep on the desert; they reached Cheyenne the next morning.

Miss Inez Patterson, who had covered 600 miles, was tired and ill. There being no one else to ride her machine, Dr. Patterson, though suffering from a dislocated shoulder, undertook the ride, which was over 100 miles. He was forced to go to bed immediately upon reaching Cheyenne.

After a stay of two nights and a day in Cheyenne a start was made for Denver at 6 a. m. Saturday. The roads between Cheyenne and Denver were very good, in fact, the best encountered. The party rode into Denver at 2 p. m., having covered 110 miles since leaving Cheyenne.

The Goodyear tire car left Cheyenne several hours later than the main party, but arrived in Denver only half an hour behind, having averaged 35 miles an hour.

After hotel accommodations, etc., had been secured the tourists were waited upon by the Governor of Colorado. A pleasant evening was spent at White City.

Sunday morning a sight-seeing trip through Denver was enjoyed by the tourists, and at 11 a. m. they had their pictures taken. In the afternoon all went to Tuilleries track to see the racing on the boards.

Monday, August 19.—After a short rest the tourists enjoyed a train ride 100 miles up the mountains to Glacier Park, where they saw the most beautiful scenery on the route. The Short Grass Club furnished refreshments of all kinds. By 6 o'clock all were back in Denver. This was the most enjoyable day of the trip. In the evening all went to City Park, the finest in Denver.

Concerning Some of the Tourists.

WH. KNAR, Thor agent at Beloit, Kan., joined the tour at Atwood. He was accompanied by Mrs. Knar.

PAUL WARNER, president of the Short Grass Club, was the first rider to own a twin machine in the State of Kansas. On one of the tours of the Short Grass Club Warner was called Kickapoo Wopple Pop, chief of the Yew Yew Tribe. Warner has with him on this year's tour Miss Edna Ford, his bride-to-be.

NOT to be outdone Wells Bennett also had his intended on the tour.

A. W. STEVENS, employed at the Denver branch of the Hendee Manufacturing Company, is the young fellow who would rather not go on a tour if he had to pass a man in trouble without giving help.

THE Julesburg people showed the boys a great time, but the opinion was that they had nothing on Sterling.

WE. JOHNSTON, manager of the Hendee Denver branch, gave a dinner party for the tourists Sunday noon.

AT Cheyenne, while the tourists were watching the broncos, several made mention of the fact that the "busters" had something to learn from the Short Grass tourists.

INEZ PATTERSON'S EXPERIENCE.

FRIDAY, August 9, 1912.—Left Pratt for Garden City. Had two spills east of Greensburg. Reached Cimeron after dark, where she stayed overnight. Met Paul Warren and Miss Ford at Cimeron. Met Topeka and Salina boys on way to Garden City.

August 10.—Encountered bad roads between Cimeron and Garden City, arriving at the latter place in time for dinner. Went to track to see races. Toured city in auto.

August 11.—Roads at start of tour fair and partly bad. Secured oil and gas at Scott City. Encountered bad roads after leaving Scott City and had to wade across Smoky Hill River. Good roads to Oakley, where dinner was served. Riding to Colly was also good, but not so to Atwood, at which place tourists did not arrive till dark.

August 12.—Left for Stratton at 9:30 a. m., roads again being disagreeable. Had a good time at Stratton. One fall on the way to Wanada, where they ate dinner. Three spills on way to Imperial, roads being very bad. Arrived on time.

August 13.—Up at 4 o'clock. Left Imperial for Julesburg; roads still very poor. One tumble. Had a chicken dinner at the park. Started for Sterling at 2:30 p. m. About two miles out two-speed went to the bad and was towed for six miles. After fixing two-speed again resumed journey. Met two Sterling people fifteen miles out of Sterling. Stopped on road on account of rain. Put machine in wagon and continued to Sterling in auto, but got stuck in mud eight miles from Sterling. A passing hay rack was used to reach a farm house, where dinner was obtained. Phoned to Sterling for a buggy, but had to stop at farm over night. Fixed up auto in the morning and came on to Sterling.

NEW ORLEANS RACES.

AT the Firemen's Festival, held at the New Orleans (La.) Fair Grounds, three motorcycle events were run off on August 11, a ten-mile for twins, and two five-mile events for singles.

In the twin-cylinder motorcycle event O. Vantayer, a New Orleans boy and a well-known amateur rider, covered the ten-mile course in 14:54½ in true dare-devil fashion. Vantayer's riding was of a spectacular nature, and upon his completion of the ten miles the little Frenchman was roundly applauded. In the five-mile single-cylinder, free-for-all race, J. A. Sterken was thrown from his machine and sustained a broken nose and cuts and bruises about the face and body. Charles Paretti and J. A. Sterken had been running neck and neck in the fourth lap of the race, and Sterken attempted to pass Paretti in the three-quarter turn. As he swerved his machine he apparently became temporarily blinded by the dust, and ran his front wheel into the back wheel of the leading machine. Following are the summaries:

Five-mile single cylinder event—Charles Paretti, first; J. A. Sterken, second; Leo Sutter, third. Time, 8:32.

Ten-mile twin cylinder event—O. Vantayer (Indian), first; O. W. Fenner (Flying Merkel), second; W. Elbert (Indian), third. Time, 14:54½.

Five-mile single cylinder free-for-all event—Charles Paretti (Indian), first; Leo Sutter (Indian) second.

RED HEAD PLATINUM POINT PLUG.

AFTER nearly a year of experiment at the hands of ignition experts, the Red Head Platinum Point Magneto Plug is at the service of spark plug users.



For the information of those whose curiosity has been aroused by the unique card which was mailed to the trade to announce its birth on July 4, and by the memory-teasing bullet-shaped advertisements which have been scattered throughout the advertising pages of trade journals, it may be stated that the latest addition to the happy family of Red Heads bears a striking physical resemblance to its older brothers. To avoid confusion, the Platinum Point plug has been marketed with a double-dipped and highly polished nickel-plated shell, bushing and cap.

Of course, the plug bases its middle names upon the fact that the center electrode has a solid platinum point. One of the reasons why this plug has been so long in making its appearance is that it took months to perfect the process for welding the platinum up to the center electrode. The platinum used is 1-32 of an inch thick and flows back 1-32 of an inch. As the liberal use of this grade of platinum (which is more costly than the purest gold) indicates, no expense has been spared to bring the Red Head Platinum Point Plug up to the high state of efficiency.

Another innovation is a combination screw top and magneto type terminal. This terminal will accommodate snap, ring or slip cable connections of all sizes and designs.

So successful has the simple and substantial Red Head construction proven in racing cars ranging from 30 to 210 h. p., and showing compression as high as 90 pounds, that well enough has been let alone and consequently no change is apparent in the design of the shell or bushing. And the Red Head porcelain has also given splendid evidence of its stamina.

A MILE IN 37.

COLUMBUS, O.—A new half-mile track record was hung up at the Sunday afternoon races at the motordrome when Ray Seymour, the speedy California rider, negotiated the mile in 37 seconds flat. This is within one-fifth of a second of the world's record made on the mile board track at Los Angeles. The Columbus saucer is a half-mile in circumference. The Sunday meet was the best since the completion of the motordrome. The starters were numerous and the finishes were generally close and exciting. Excellent time was made.

L. P. Birkenbach finally won the Columbus Motorcycle Club cup, which now becomes his permanent property, he having won it three times. The two previous winnings were on the dirt track at Columbus. In the final brush Birkenbach was hard pushed by George Evans, but won out in the third heat.

The trade riders event, also run in three heats, was an interesting race, and won by Evans. In the professional races, Seymour showed himself faster than Balke and won the big event of the day. The attendance was large, and the track managers are optimistic.

BRIGHTON RACES

FLECKENSTEIN FAILS TO DEFEAT CHAPPLE.

Johnnie Albright Cleans the Board in the Professional Races.

SATURDAY, August 10.—Larry Fleckenstein, the Salt Lake City speed marvel, failed in his attempt to lower Arthur Chapple's colors in the feature race of the evening at the Brighton Stadium Motordrome. In the first heat the riders raced abreast for three miles, when Fleckenstein was forced to quit because of carburetor trouble. In the second heat he had his motor running beautifully and put up a spectacular race. Taking the lead at the start, he maintained it until the bell lap, when Chapple nosed his wheel ahead at the tape and won by a fraction of a wheel length.

Johnnie Albright had an easy time of it in the first heat of the six-mile professional race, lapping the other riders in the last mile. In the second heat he was forced to his utmost speed by Billy Wray, and won only by inches. In the third heat, after leading the bunch for four miles, his motor began to miss. He dropped back to last position, and finished there.

Albright rolled up a total of eleven points. Wray was second with ten points to his credit, and Lockner third with eight.

Howard Wray, brother of Billy Wray, the "pro." rider, made his debut as an amateur racing star by winning the two heats in which he was entered in, in each case defeating J. B. French, his nearest competitor, by a comfortable margin.

The ten-mile handicap race brought out the classiest riders of any race held at the Motordrome. Chapple was scratch, Johnnie Albright had one lap, Billy Wray two laps, and Mercier and Lockner three laps each.

The race was an exciting one from start to finish. Lockner just won out over Chapple; Ferdie Mercier was third and Billy Wray fourth. The summaries:

Three-mile amateur handicap race; open; 61:00 class—First heat—Won by J. B. French, Brooklyn (Indian), scratch; second, J. Doeffler, Brooklyn (Merkel); two laps. Time, 2:25½. Second heat—won by Howard Wray, Brooklyn (Indian), scratch; second, J. B. French, Brooklyn (Indian), scratch; third, J. Doeffler, Brooklyn (Merkel); two laps. Time, 2:22¾. Third and final heat—Won by Howard Wray, Brooklyn (Indian), scratch; second, J. B. French, Brooklyn (Indian), scratch; third, J. Doeffler, Brooklyn (Merkel); two laps. Time, 2:17½.

One-mile record trial by Arthur Chapple—Time, 39½; lost.

Six-mile professional race; open; 61:00 class—First heat—Won by J. Albright, Denver (Indian); second, George Lockner, Syracuse (Indian); third, Wm. H. Wray, Brooklyn (Indian). Second heat—Won by J. Albright, Denver (Indian). Time, 4:20¾; second, Wm. H. Wray, Brooklyn (Indian); third, George Lockner, Syracuse (Indian). Time, 4:47½. Third and final heat—Won by Wm. H. Wray, Brooklyn (Indian); second, George Lockner, Syracuse (Indian); third, Ferdie Mercier, Brooklyn (Indian); fourth, J. Albright, Denver (Indian). Time, 4:39¾.

Special four-mile match race (between Arthur Chapple, of New York, and Larry Fleck-

enstein, of Salt Lake City)—First heat—Won by Arthur Chapple; Fleckenstein out. Time, 3:00¾. Second heat—Won by Arthur Chapple by 2 yards. Time, 3:00¾.

Ten-mile professional, handicap race; open; 61:00 class—Won by George Lockner, Syracuse (Indian), three laps; second, Arthur Chapple, New York (Indian), scratch; third, Ferdie Mercier, Brooklyn (Indian), three laps; fourth, Wm. H. Wray, Brooklyn (Indian), two laps; J. Albright, Denver (Indian), out—carburetor trouble. Time, 7:01¾.

Wray Captures One-Hour Race.

BROOKLYN, N. Y., August 11.—Billy Wray, the Brooklyn "phenom" who has been consistently winning at the Brighton Stadium Motordrome, annexed the feature race of the season by winning the one-hour professional from a classy field.

Eight riders were on the program for this event, but only five faced the starter, viz.: Arthur Chapple, Johnnie Albright, Wm. H. Wray, George Lockner and Wm. R. Shields. Chapple led at the start with all the other riders closely bunched. Shields quit in the first mile with engine trouble. At the sixth mile Chapple's engine began to miss and he was forced to stop. Quick adjustments were made and he was off again. Albright had shot into the lead and Chapple set out to catch him, but was forced to stop twice in the next fifteen miles, and had to quit at the twenty-second mile when his engine ran hot.

Johnnie led at the quarter hour with nineteen miles to his credit. Billy Wray had eighteen miles and Lockner 17 miles and one lap. Lockner was forced to stop after riding for half an hour. He was on again as soon as his tanks had been replenished.

During the next quarter hour Albright led by a safe margin. Wray and Lockner alternated at pacemaking each other, riding at a terrific pace. At the beginning of the last fifteen-minute period Albright was seen to suddenly slow down and finally stop. His driving chain had broken after he had covered sixty-five miles. He took another machine and tried to hold his lead, but his mount was not in perfect order and he again stopped at the sixty-seventh mile. Billy Wray took the lead and led the rest of the way to the finish, winning by a mile and a half over Albright. Lockner was third, with sixty-five miles and one lap. Throughout the race Wray made only one stop, when he replenished his oil and gasoline supply at the fifty-fourth mile. On the last lap Lockner, in slowing down, ran off the track into the infield, and in attempting to mount the track again he had a fall which shook him up considerably. He had become dazed and had to be supported from the track.

The other races were cut to a three-mile amateur event, which went to Johnnie Constant and one final heat of the five-mile professional race. Billy Wray also won this event by a foot over George Lockner.

Howard Wray had a spill in the first heat of the amateur race. He slid for 50 yards before he could stop. Luckily he only received a few bruises. The summaries:

Three-mile amateur race; open; 61:00 class—First heat—Won by John U. Constant, Brooklyn (Indian); second, J. B. French, Brooklyn (Indian); Howard Wray, Brooklyn (Indian), fell. Time, 2:29¾. Second heat—Won by John U. Constant, Brooklyn (Indian); second, J. B. French, Brooklyn (Indian); Howard Wray did not start. Time, 2:25½.

Five-mile professional race; open; 61:00 class—Won by Wm. H. Wray, Brooklyn (Indian), by one-half wheel; second, George Lockner, Syracuse (Indian); third, Ray Hofstatter, Indianapolis, (Indian). Time, 3:53 flat.

One-hour professional record race; open; 61:00 class—Won by Wm. H. Wray, Brooklyn (Indian), 69 miles, one-half lap; second, Johnnie Albright, Denver (Indian), 67 miles, 2½ laps; third, George Lockner, Syracuse (Indian), 65 miles, 1 lap; Shields out first mile; Chapple out twenty-second mile.

BRIGHTON RACERS IN MISHAPS.

Chapple Dislocates Shoulder and King Is Severely Burned.

BROOKLYN, N. Y.—Tuesday, the 13th, was a bad night for the Brighton speedsters. On the first lap of a two-mile record trial Arthur Chapple was thrown from his machine when his front tire blew out. He was traveling at a rate of 90 miles an hour, and sustained a dislocated and torn shoulder. Dr. Thompson, the track physician, stated that Chapple would probably be able to ride again on Sunday.

F. A. King, of Kansas City, was severely burned about the legs when his clothing caught fire from the exhaust of his engine in the first heat of his match race with Johnnie Albright. King fell from his machine and before he could wrench his leggings off, the blaze had burned through to his leg, searing it badly. Johnnie Constant put the fire out with a hand fire extinguisher. After King's burns had been dressed he pluckily rode out the next two heats of the match race.

Johnnie Albright carried off the honors of the match race, winning two heats out of three. He repeated his performance in the Bruce Brown eleven-mile handicap by winning over Billy Wray, his nearest opponent, by a third of a lap. Wray had two laps' handicap.

Howard Wray was suspended for his weird riding in the first heat of the amateur race. Summaries:

Three-mile amateur race; open; 61:00 class—First heat—Won by John U. Constant, Brooklyn (Indian); second, Howard Wray, Brooklyn (Indian); third, J. B. French, Brooklyn (Indian). Time, 2:50¾. Second heat—Won by Constant; second, French. Time, 2:23¾.

Six-mile race; professional; open; 61:00 class—First heat—Won by Ferdie Mercier, Brooklyn (Indian); second, Billy Wray, Brooklyn (Indian); third, Ray Hofstetter Indianapolis (Indian). Time, 4:32¾. Second heat—Won by Hofstetter; second, Wm. R. Shields, Syracuse (Indian); third, Wray. Time, 4:36¾. Final heat—Won by Mercier; second, Wray; third, Shields. Time, 4:30¾.

Four-mile match race (between Johnny Albright, Denver, and F. A. King, Kansas City)—First heat—Won by Johnny Albright. Time, 2:57¾; second heat, three miles—Won by F. A. King. Time, 2:10¾. Final heat, three miles—Won by Albright. Time, 2:12¾.

Eleven-mile professional handicap race; open; 61:00 class—Won by Johnny Albright, Denver (Indian), scratch; second, Wm. H. Wray, Brooklyn (Indian), two laps; third, Ray Hofstetter, Indianapolis, two laps (Indian). Time, 7:59¾.

THE Springfield (O.) M. C. will hold a race meet Labor Day, September 2, 1912.

MORE ACCIDENTS AT BRIGHTON.

Four Riders in Spill When Shields Collides with Hofstetter.

BROOKLYN, N. Y., August 16.—At the same unlucky spot where Arthur Chapple had taken a spill Tuesday, four riders had a serious mix-up when W. R. Shields, of Syracuse, collided with Ray Hofstetter, the Indianapolis pilot. Hofstetter (more familiarly known as "hotstuffer") was setting a slow pace on the first lap of the five-mile professional race, with all the other riders close behind. Shields, in attempting to pass Hofstetter, slid against him and both fell. George Lockner could not avoid the riders and he crashed into them. Ferdie Mercier ran off the track into the infield and was thrown among the weeds. Billy Wray was far enough behind to speed up, climb the bank and thus escape a fall. Shields was insensible when picked up. He was quickly revived, and his sole injury was a wrenched left shoulder. Hofstetter had contusions of the leg. Lockner and Mercier escaped unhurt.

Wray and Mercier were the only riders able to re-enter the race and they put up a good race, Wray winning by a length in 3:18½.

Johnny Albright "came back" by winning the fifty-mile race. Wray was a strong contender until the twentieth mile, when he was forced to quit because of a broken oil pipe.

Ferdie Mercier was unable to stand the continuous grind, and at the twenty-fifth mile stopped to rest, as his hands and feet were numb. He lost two miles before he resumed riding.

Albright was far in the lead and kept increasing it, ultimately winning by a margin of six miles and two laps over Mercier, who was second. Summaries:

Five-mile professional race; open; 61:00 class—Won by A. H. Wray, Brooklyn (Indian); second, Ferdie Mercier, Brooklyn (Indian). Time, 3:18½.

Three-mile race; amateur; open; 61:00 class—First heat—Won by James B. French, Brooklyn (Indian); second, John U. Constant, Brooklyn (Indian). Time, 2:25½. Second heat—Won by John U. Constant; second, James B. French. Time, 2:26½.

Fifty-mile race—Won by Johnny Albright, Denver (Indian); second, Ferdie Mercier, Brooklyn (Indian). Time, 39:17½.

HASHA GETS TRACK RECORD.

BROOKLYN, N. Y., August 17.—Driving his machine at the rate of over 96 miles per hour, at the Brighton Stadium Motor-drome, Eddie Hasha, the Texas speed marvel, established new records for the track for two, three and four miles, when he defeated Mike Costello, the New York pilot, in straight heats in their four-mile special match race.

Hasha covered the first mile in 39 seconds flat, the second in 37½ seconds, and the third and fourth miles in 37½ seconds each. The best previous track record for four miles, held by Thomas, of Philadelphia, was beaten by 9½ seconds, and the one-mile track record, held by Arthur Chapple, was lowered 1½ seconds.

Costello, whose machine ran badly, was completely outclassed, Hasha winning each heat by over three-quarters of a mile. Hasha's time was only 1½ seconds behind the official record for four miles, held by Ray Seymour, of Los Angeles, Cal.

Billy Wray, the local speedster, sprung a

surprise when he showed his heels to George Lockner, of Syracuse, in a special four-mile match race, after losing the first heat. Wray won the second heat when Lockner was forced to quit on account of engine trouble. In the final heat Lockner contested every foot of the distance, only to lose by inches on the final lap. Lockner finished the last two laps on a flat tire.

Johnny Albright cleaned the boards in the six-mile professional race, winning each heat by a spurt on the final lap. Mercier carried off second honors. Summaries:

Special four-mile match race between Wm. H. Wray, of Brooklyn, and George Lockner, of Syracuse—First heat—Won by George Lockner (Indian). Time, 3:07½. Second heat—Won by Wm. H. Wray (Indian). Time, 3:12½. Third heat—Won by Wm. H. Wray (Indian). Time, 3:05½.

Six-mile professional race; open; 61:00 class—First heat—Won by Johnny Albright, Denver (Indian), first; Ferdie Mercier, Brooklyn (Indian), second; George Lockner, Syracuse (Indian), third; Wm. H. Wray, Brooklyn (Indian), fourth. Time, 4:24½. Second heat—Won by Johnny Albright, Denver (Indian), first; Ferdie Mercier, Brooklyn (Indian), second; George Lockner, Syracuse (Indian), third; Wm. H. Wray, Brooklyn (Indian), fourth. Time, 4:25½. Final heat—Won by Johnny Albright, Denver (Indian); Ferdie Mercier, Brooklyn (Indian), second; Wm. H. Wray, Brooklyn (Indian), third. Time, 4:22½.

Special match race (four miles) between Eddie Hasha, Texas, and Mike Costello, of New York—First heat—Won by Eddie Hasha (Indian). Time, 2:40½. Second heat—Won by Eddie Hasha (Indian). Time, 2:31½.

Attendance—8,000.

CHAPPLE DEFEATS COSTELLO.

BROOKLYN, N. Y., August 18.—Arthur Chapple defeated Mike Costello in straight heats of their special three-mile match race. Chapple raced away from Costello in the first heat, gaining a lap and winning in 2:01½.

The second heat was hotly contested for one mile, when Chapple drew away. Time, 2:05½.

Ferdie Mercier carried off the honors in the six-mile professional race, winning two heats and finishing second in the other. The second heat was the first event on this track in which no rider covered the entire distance. George Lockner could not start, as his tank had been split when Charles Groning, who was using it, fell in the first heat of his match race with Howard Wray. Billy Wray had chain trouble and Mercier stopped on the fifth mile. Mercier easily defeated Wray in the final heat, winning by three-quarters of a lap.

Charles Groning crashed into Howard Wray on the first lap of their special match race. Groning was thrown into the infield and received contusions. His machine was rendered useless. Wray escaped injury. The other heats were called off.

The handicap race was cut to nine miles. Four starters faced the flag, with Chapple scratch, Costello and Mercier being conceded two laps, and Billy Wray three.

Chapple rapidly overhauled the field with the exception of Ferdie Mercier, who rode an exceptionally good race. Mercier hung close to Chapple until Chapple put on a sudden burst of speed in an endeavor to make up the lap which separated him from his opponent. The distance was short, however, and Mercier

flashed home the winner by half a lap. It was a great race. Summaries:

Six-mile professional race; 61:00 class; open—First heat—Won by George Lockner, Syracuse (Indian); Ferdie Mercier, Brooklyn (Indian), second; W. H. Wray, Brooklyn (Indian), dropped out. Time, 4:28½. Second heat—Won by Ferdie Mercier, Brooklyn (Indian), four miles, one lap; W. Wray and George Lockner quit. Time, 3:16½. Final heat—Won by Ferdie Mercier, Brooklyn (Indian); W. H. Wray, Brooklyn (Indian), second. Time, 4:37½.

Special match race between Arthur Chapple, of Brooklyn, and Mike Costello, of New York—distance, three miles—First heat—Won by Arthur Chapple. Time, 2:01½. Second heat—Won by Arthur Chapple. Time, 2:05½.

Special nine-mile handicap race—Won by Ferdie Mercier (Indian), two laps; Arthur Chapple (Indian), scratch, second; Mike Costello (Merkel), two laps, third; W. H. Wray, three laps, fourth. Time, 6:17½.

AUGUST 20TH SUMMARIES.

BROOKLYN, N. Y., Aug. 20.—A heavy mist caused Arthur Chapple to take a serious spill on the first lap of a two mile exhibition race.

He was caught under the machine, sliding for a distance of over 100 yards. When picked up he was unconscious, his left shoulder, which had not yet healed from his previous injury, was again dislocated, and he also received internal injuries.

The final heat of the six mile professional race was the scene of another bad mix-up. Ferdie Mercier and Howard Wray crashed into one another, and Wray had his foot caught in the chain. His shoe was ripped off and his ankle fractured. Mercier escaped unhurt.

Johnny Constant won both heats of the amateur race in handy style. Mercier won the first heat of the six mile professional race, and Mike Costello the second. Larry Fleckenstein, of Salt Lake City, won the match race. Johnny Albright failed to qualify in either heat, as he experienced engine trouble.

The remainder of the program was called off by the referee, as the track was in too dangerous a condition for riding. The summaries:

Three mile amateur race, 61.00 class open—First heat won by J. U. Constant; J. B. French, second; time, 2:25½. Second heat—Won by J. U. Constant; French, second; time, 2:22½.

Special match race between Larry Fleckenstein, of Salt Lake City, and Johnny Albright, of Denver—first heat won by Fleckenstein; time, 1:53½. Second heat won by Fleckenstein; time 2:12½.

Six mile professional race, 61.00 class, open—First heat won by Mercier; Costello, second; Lockner, third; time, 4:27½. Second heat won by Costello; Mercier, second; W. Wray, third; time, 4:20½.

HARLEM CLUB RUN.

GREENWOOD LAKE was the destination of the Harlem M. C. run on August 11, ten riders starting in spite of the threatening appearance of the weather. The route was over Fort Lee ferry, to Englewood, Hackensack, Paterson and New Foundland to the Lake, where lunch was served. About 4 p. m. the riders were caught in a rainstorm and took shelter, resuming the journey when the rain ceased here.

GOOD SPORT AT NEWARK

Plenty of Riders, Large Crowds and Keen Competition at the Jersey Motordrome.

NEWARK, N. J., August 17.—Riders are becoming so numerous that the Class "B" event has to be run in sections. George Hamilton, of West Orange, and Mike Costello, New York, coming at the last minute, made eight riders for Class "B." Costello, T. A. King, Albert Carlson and George Hamilton were put in section No. 1, and Earl Eckel, of Washington, Johnny King and Fred West were delegated to section No. 2.

Carlson (Indian) and Costello (Merkel) were matched for the Sweepstakes Elimination No. 5. Carlson made a runaway of it, gaining the half-lap on Costello before they had gone three-quarters of a mile, doing it in 37½ seconds.

The fast heat of the match race between Johnny King (Indian), of Newark, and F. A. King (Indian), of Denver, was started to-day, and was won by Johnny King. The summaries:

New Jersey Motorcycle Club race, 5 miles—Won by Henry Webber, Jr. (Indian), New Brunswick; second, Carl Segelbach (Indian), Newark. Time, 4 min. 22 sec.

First heat, Class "B," 2 miles, professional—Won by F. A. King (Indian), Denver; second, Mike Costello (Merkel), New York; third, Albert Carlson (Indian), Providence, R. I. Time, 1 min. 32 sec.

Second heat, 2 miles—Won by Johnny King (Indian), Newark; second, Earl E. Eckel (Indian), Washington; third, Fred West (Indian), San Francisco. Time, 1 min. 26½ sec.

Final heat, 6 miles—Won by Johnny King, Newark; Fred West, San Francisco, second; Frank King, Denver, third. Time, 4 min. 29 sec.

First heat, Class "A," 2 miles—Won by Eddie Hasha, Waco, Texas (Indian); second, Ray Peck, Los Angeles (Excelsior); third, Lawrence Flickenstein (Indian). Time, 1 min. 24½ sec.

Second heat, 2 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 1 min. 22½ sec.

Third heat, 3 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 2 min. 9½ sec.

Sweepstakes elimination heat No. 5, Australian pursuit style—Albert Carlson, Providence (Indian), vs. Mike Costello, New York (Merkel)—Won by Carlson. Distance, ¼-mile. Time, 37½ sec.

Special Match race, professional—Johnny King, Newark (Indian), vs. Frank King, Denver (Indian). Distance, 3 miles—Won by Johnny King. Time, 2 min. 14 sec.

Professional Invitation, 2 miles—Won by George Hamilton, West Orange (Indian); second, Albert Carlson, Providence (Indian); third, Mike Costello, New York (Merkel). Time, 1 min. 30½ sec.

Free-for-all, professional, 6 miles—Won by Eddie Hasha (Indian); second, Peck (Excelsior); third, Flickenstein (Indian); fourth, Frank King (Indian); fifth, Fred West (Indian). Time, 3 min. 58½ sec.

Sunday, August 18.—William Brown, of Newark, was an added starter in Class "B" to-day. He finished second in the final by riding high on the track and came within an ace of throwing Carlson, of Providence, over the fence two or three times by switching. Carlson, afraid to attempt to go by him, finished third, and immediately filed a protest to the referee.

The referee, however, explained to him that Brown was a new rider and should be given a chance. Brown got second money in spite of the protests. The riders all favored Carlson.

A five-mile professional running race was a new attraction. The best of runners in the East competed, including Billy Queal, the American ten-mile champion, who won in 26 min. 18 sec. The summaries:

N. J. Club race, 5 miles—Won by Carl Segelbach (Indian), Newark; second, Henry Webber, Jr. (Indian), New Brunswick. Time, 4 min. 13½ sec.

First heat, class "B," 3 miles—Won by Albert Carlson (Indian), Providence; second, Frank King (Indian), Denver; third, Wm. Brown (Indian), Newark. Time, 2 min. 15½ sec.

Second heat, 3 miles—Won by Johnny King (Indian), Newark; second, Fred West (Indian), San Francisco; third, Geo. Hamilton (Indian), West Orange. Time, 2 min. 15½ sec.

Final heat, 4 miles—Won by Johnny King (Indian), Newark; second, Wm. Brown (Indian), Newark; third, Albert Carlson (Indian), Providence. Time, 3 min. 01½ sec.

First heat, class "A," 2 miles—Won by Eddie Hasha, Waco, Texas (Indian); second, Ray Peck (Excelsior), Los Angeles; third, Lawrence Flickenstein (Indian), Denver. Time, 1 min. 25 sec.

Second heat, 2 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 1 min. 25½ sec.

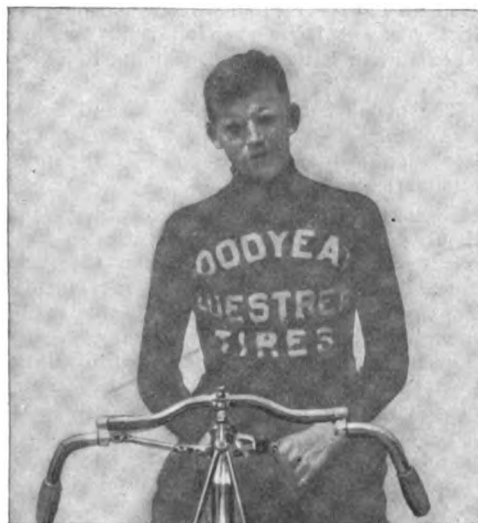
Final heat, 3 miles—Won by Hasha; second, Peck; third, Flickenstein. Time, 1 min. 58½ sec.

Second heat, match race, 5 miles—Johnny King (Indian), Newark, vs. Frank King (Indian), Denver—Won by Johnny King. Time, 3 min. 48½ sec.

Professional, 5 miles, runners—Won by Billy Queal. Time, 26 min. 18 sec.

Motordrome Sweepstakes, elimination No. 6—Won by L. Flickenstein, Denver. Distance, 3¼ miles. Time, 2 min. 46½ sec.

Free-for-all, handicap, 6 miles—Won by Eddie Hasha, Waco, Tex. (Indian); second, Ray Peck, Los Angeles (Excelsior); third, Albert Carlson (Indian), Providence, R. I.; fourth, L. Flickenstein, Denver (Indian); fifth, Frank King (Indian), Denver.



DAN WILLIS.

Who was badly injured at Canton Saturday, the 10th inst. He will recover, it is said.

WILL BUILD SAUCER.

ST. LOUIS is to have a quarter-mile saucer ready for race meets before the end of August. The track is being constructed at Priester's Park, on South Grand avenue, and the banking will be steep so that speeds of 120 miles per hour can safely be attained. An unusually large seating accommodation is promised. With the Cleveland motordrome already in full swing, it is proposed to work this and the new St. Louis track in conjunction, riders being shifted from one to the other according to a schedule. The new enterprise is backed by Cleveland capital and is under the management of Charles P. Salen.

BOBZINE AND MILLER WIN.

MARSHALLTOWN, Ia., fans were treated to a combined automobile and motorcycle meet on Friday, August 9, but only two events were allotted for the single-trackers. These were a three-mile match between Bobzine and Kinzie, and a five-mile race, in which eight riders started. Bobzine won, his times being 4:06½, 4:26 and 4:22.12. In the second event B. Miller won, with I. E. Hubler second and Kinsey third. The time was 6:41½.

DECATUR RACE MEET.

AUGUST 25 is the date set for the next race meet at the Decatur (Ill.) track. The card will probably bring out Baker of Indianapolis, and "Shorty" Mathews and Stone, both on their Thors. Ten events are scheduled.

KLEBES AND VANDERBERY

Star on Point Breeze Motordrome—Veditz Winner of Unknown Distance Event.

FIRST lieutenant Robert Byrnes and officers of Troop G, First Squadron Cavalry, Pennsylvania National Guard, were the guests of the management of the Point Breeze Motordrome, Philadelphia, on August 15, when they witnessed some riding that bade fair to put their famous monkey drill in the shade. Klebes made a mile in 44 seconds, and also won the final heat of Class B, in which Klebes, Thomas, Vanderbery, Pancoast, and Veditz rode. The contestants kept close together, with the exception of Pancoast, until about five yards from the finish, when Klebes won out only by the length of a wheel. Second place was a tie between Thomas and Vanderbery. In the run-off Vanderbery won. There was some daring riding in the unknown distance race, five men starting and only four finishing. The riders were so bunched that it was extremely hard for the judges to decide the winner. In this event Klebes dropped out through engine trouble, Veditz winning. William Vanderbery was the star of the evening, winning two first and two second prizes. Summaries:

First heat of Class B, 4 miles, won by Klebes; second, Vanderbery; third, Veditz; time, 2:57½. Final heat won by Klebes, Vanderbery second, Thomas third. Four miles; time, 2:13 flat.

First heat of eight-mile open event, 4 miles, won by Vanderbery; second, Klebes; third, Veditz; fourth, Thomas; time, 2:55½. Final heat won by Vanderbery; second, Klebes; third, Veditz; fourth, Pancoast; time, 2:58½.

Match race, six miles, won by William Vanderbery. Time for first heat, 2:16 flat. Final heat, 2:16½.

Unknown distance open event (9 miles), won by Veditz; second, Vanderbery; third, Thomas; fourth, Pancoast; time, 6:47 flat.

PHILADELPHIA, August 13.—The races at the Point Breeze Motordrome, Philadelphia, were featured by two fires, both from broken gasoline pipes. After his machine had been pulled into a ditch and the fire extinguished, Vanderbery continued in the races, but Thomas was not so fortunate, his machine being put out of commission. For the second time in less than one week Harry Klebes, the butcher boy star, of this city, was the victor in every race in which he participated. Thomas, the Western rider, was disqualified in the open event for fouling Vanderbery near the finish of the four miles.

The best race of the evening was the eight-mile open, in which Klebes, Vanderbery and Thomas rode in sensational style, Klebes winning as in the other events. Summaries:

First heat of Class B, 4 miles—Won by Klebes, on an Indian; second, Vanderbery (Indian); third, Thomas (Indian). Time, 3:05 flat.

Final heat—Won by Klebes (Indian); second, Vanderbery (Indian); third, Thomas (Indian); fourth, Pancoast (Indian). Time, 2:15½.

First heat of open event, 4 miles—Won by Klebes (Indian); second, Vanderbery (Indian); third, Pancoast (Indian); Thomas disqualified. Time, 3:06.

Final heat, 4 miles—Won by Klebes (Indian); second, Vanderbery (Indian); third, Pancoast (Indian); fourth, Thomas. Time, 2:46½.

First heat of special match race between Klebes and Vanderbery, 3 miles—Won by Klebes. Time, 2:18½.

Final heat, 3 miles—Won by Klebes. Time, 2:13 flat.

KANSANS AT DENVER RACES

President Patterson, of the F. A. M., Witnesses One of Best Meets of Season.

DENVER, August 19.—One of the best programs of races ever witnessed on the Denver saucer was put on at the regular Sunday afternoon race meet at Tuileries. A large crowd saw the events, including Dr. Patterson, President of the F. A. M. Charles Fuller Gates officiated at the meet. They were here as leaders of the Kansas Short Grass Club Tour. A series of races between Kansas and Colorado riders was planned, but some of the visitors' machines were not in condition to race and Wells Bennett was the only Kansan who was able to participate. He won the first race for single cylinder machines.

The local riders made up in grand style for the inability of the Kansan racers to appear and staged three of the prettiest and hardest fought races ever witnessed in the West. Fredericks captured the honors of the day by winning two events, while L. E. Bowen won the title of the original hard luck rider. He finished second in the three big races and in two of them lost only by a fraction of an inch. In the second race he got off in front, but was overtaken by Fredericks, who won handily. Bowen led for four and two-thirds miles in the third event, when Swartz came up beside him, and in a neck and neck battle Swartz nosed him out.

Fredericks and Bowen rode so closely in the three miles match race that the crowd declared the contest a draw and insisted in loud voices upon having the race run over. The judges had difficulty in deciding the winner, but finally gave the race to Fredericks. The consolation event was quite as interesting as the balance of the program until after the second mile, when Cox forged to the front, winning over Richards by a wide margin.

Miss Inez Patterson, after being introduced to the crowd, was sought out by all the inquisitive fans and forced to re-tell the story of the hardships endured on the trip to Denver. The dames with the willow plumes and silk dresses were left in the shade, for little Inez in the khaki suit was the center of attraction.

Summaries: Two mile open professional, 30.50 class—Wells Bennett (Indian); Ted Hurlbut (Indian); R. Barclay (Excelsior). Time, 1:50¾.

Five mile open professional, 61 class—Curley Fredericks (Excelsior); L. Bowen (Merkel); E. Swartz (Excelsior). Time 3:34.

Five mile open professional, 61 class—E. Swartz (Excelsior); L. Bowen (Merkel); J. Cox (Merkel). Time, 3:44¾.

Three mile match race, professional, 61 class—Curly Fredericks (Excelsior); L. Bowen (Merkel). Time, 2:15.

Three mile consolation, professional, 61 class—J. Cox (Merkel); Bigenough Richards (Indian); H. Noll (Merkel). Time, 2:16¾.

TUILERIES PARK, Denver, Sunday. August 11.—Silvers Boyd successfully shook the jinx which has been following him for some time and succeeded in winning the twenty-five mile event from a field of five starters. He was off in the lead at the crack of the gun, successfully eluding any of his competitors who had ambitions of hanging on to his pace, and at the finish of the race

was the only contestant whose machine was in running order. After the second lap Richards was forced to quit with engine trouble, and Swartz followed at the end of the second mile. After Bowen and Fredericks had been battling for second place, with first one and then the other having the best of the argument, Bowen was suddenly thrown out of the running by lack of oil. After getting a new supply, he made two unsuccessful attempts to re-enter the race, but his machine refused to hit on two cylinders until after Boyd had crossed the tape. Fredericks had a miraculous escape in the first lap of the twenty-fifth mile when his rear tire blew up, but by shrewd manipulation he managed to maintain control of his machine and guided it to the running board, where he dismounted.

The match race between Bowen and Richards was fairly even until the last mile, when Bowen left his rival, winning by several yards.

The match between Fredericks and Swartz was of the hair-raising variety. Fredericks had less than a foot to the good at the finish. Summaries:

Twenty-five mile open, professional, Class B, 61—Silvers Boyd (Indian); Curley Fredericks (Excelsior); L. E. Bowen (Merkel); time, 19¾. Three-mile match race, professional, 61 class—L. E. Bowen (Merkel); Bigenough Richards (Indian); time 2:16¾. Three-mile match race, professional, 61 class—Curley Fredericks (Excelsior); Ed. Swartz (Indian); time, 2:14.

SALT LAKE CITY RACES.

SALT LAKE CITY, August 9.—Some of the best races of the season were run off last night at the Wandamere piepan. Ward showed some of the fastest riding seen this year. In his five-mile heat against Whittler he cut the track record 10 seconds, and in the eight-mile handicap broke it by 61-5 seconds.

Ward and Referee Rishel are now at it hammer and tongs. Rishel jumped Ward last night because he turned around at the start of the race to watch Whittler, who would not take the lead. From the looks of things there will be a change pretty soon, or a great clash. Saturday night of last week the "big referee" was not at the track, and one of his assistants took his place. Everything was run off smoothly and not a word of dissatisfaction was heard.

McNeil rode in great form. He took the three heats of the point race from Brodbeck and Bernstrom. Brodbeck rode hard but could not beat him. He rode well against Ward, after the latter had made up his lap handicap in the eight-mile event.

Ward had an easy time with Whittler in his match race. In the first heat, Whittler was beaten by about fifteen yards after Ward had led all the way. Whittler tried hard to steal away on Ward in the second heat, but the latter finally passed him and beat him by a quarter of a lap. Duckworth won his first race of the year in the two-mile professional after riding a hard race with McCall, who tried to go by Duckworth at the finish, but did not have the power.

The closing race of the evening was the most exciting. It was the eight-mile handicap. Whittler did not enter this race. Ward gave the other riders a lap handicap and had an easy time lapping them. After he had gained the lap, McNeil fell in behind him and

held that position until the finish. The summaries:

Point race, first heat, two miles—McNeil, Indian, first; Bernstrom, Indian, second; Brodbeck, Merkel, third. Time, 1:321-5. Second heat, three miles—McNeil, Indian, first; Brodbeck, Merkel, second; Bernstrom, Indian, third. Time, 2:17. Third heat, four miles—McNeil, Indian, first; Brodbeck, Merkel, second; Bernstrom, Indian, third. Time, 3:04. Final points—McNeil, 9; Brodbeck, 5; Bernstrom, 4.

Two-mile professional—Duckworth, Indian, first; McCall, Indian, second; Rognon, Indian, third. Time, 1:351-5.

Match race, first heat, four miles—Ward, Indian, first; Whittler, Merkel, second. Time, 2:521-5. Second heat, five miles—Ward, Indian, first; Whittler, Merkel, second. Time, 3:262-5.

Three-mile professional—McCall, Indian, first; Duckworth, Indian, second; Thomas, Indian, third. Time, 2:18.

Eight-mile handicap, factory riders—Ward, Indian, scratch, first; McNeil, Indian, one lap, second; Bernstrom, one lap, Indian, third; Brodbeck, Merkel, fourth, one lap. Time, 5:41.

OBJECT TO CLASSIFICATION.

FROM the Pacific Coast have come rumors of dissatisfaction over the new classification of riders into Amateurs and Professionals. Not only is this feeling reported current among riders, but dealers also dislike the classification and a bolt from the F. A. M. is said to be contemplated, along with the organization of a Pacific Coast body. The chief cause is said to be in the trade riders being classed as professionals, and a further and minor cause is the old time-worn one of "no benefits from the F. A. M."

To these dissatisfied ones, Secretary-Treasurer Gibson replies by quoting the new classification in detail, that a professional rider is "one who has competed for cash; or who, since the adoption of these rules, being connected either directly or indirectly with a person or firm that manufactures, assembles, sells or repairs motorcycles, motor-vehicles or internal-combustion engines, or operating them as a trade or profession, competes on tracks where the public is charged an admission; or who has otherwise failed to observe the rules applied to an Amateur." The Doctor says further: "I think you will agree with me that a man in the motorcycle trade is an Amateur as long as he does not compete on a track to which the public is charged admission." As regards the classification, this is on the lines of well-known associations such as the A. C. U. of Great Britain, and the A. A. U. of the United States.

Regarding the benefits, the new Touring Bureau which is to enable members to obtain maps of any part of the country they desire to tour in is being started, and the Doctor is working on a scheme to have members' machines insured against fire from any cause, and no matter where they are situated. These, in addition to the other benefits, not to mention the State organization and local control of F. A. M. work, seem to rebut the statements made in the "no benefit" cry. Dr. Gibson classes the feeling on the West Coast not as an outlaw movement but only a local dissatisfaction, which will soon subside with the knowledge of the real facts.

Every effort will be made to keep far-western members within the F. A. M. fold.

ON THE CLEVELAND SAUCER

Crowds as Large as Ever—Spills and Near-Spills Add Interest.

CLEVELAND, Tuesday, August 13.—Tonight a special race meet was put on by the management in honor of the International Typographical Union's Convention. A thrilling spill by Carslake, when his front tire let go in the final of the James Lynch Sweepstakes, took the breath of the spectators. Carslake's machine was wrecked, although he escaped without injury. Gibson was the big winner of the evening, taking the final in every event. Henikman trimmed Huntsberry in the amateur event. Summaries:

Four mile amateur for 7 h. stock.—Henikman, Indian, first; Huntsberry, Indian, second. Time, 3:21½.

Nine mile pro., three heats. Scored by points.—First heat, two miles: Seliga, first; Carslake, second; Gibson, third. Time, 1:32. Second heat, three miles: Gibson, first; Carslake, second; Standen, third. Time, 2:13. Third heat, four miles: Gibson, first; Knapp, second; Carslake, third. Time, 2:58.

Five mile pro., match race.—Seliga, first; Armstrong, second. Time, 3:55½.

Five mile, James Lynch Sweepstakes.—First heat, two miles: Smiley, first; Gibson, second; Carslake, third. Time, 1:30. Second heat, two miles: Seliga, first; Glenn, second; Standen, third. Time, 1:31. Final: Gibson, Indian, first; Smiley, Indian, second; Seliga, Indian, third. Time, 3:59.

Wednesday, August 14.—Tonight's races were witnessed by an overflowing crowd of 12,000 and they were thrilled when Charlie Glenn, of Toledo, narrowly escaped death in the eight mile professional race. He was forced to the steep incline over the dangerous "red strip" and on to the wire screen that separates the spectators from the speeding riders. On the last lap of the eight mile pro. race, Glenn, who was a length to the rear of Armstrong, attempted to pass his opponent. Armstrong swung into the Toledo boy and he shot to the top of the track, brushing the wire fence with his body and ripping his jersey off his back. As the machine hit the fence it rebounded half-way down the track alongside of Armstrong. Glenn kept cool and, righting his wobbling machine, dashed over the finishing line a few inches ahead of Armstrong, while the spectators that were massed in the stands stood up and cheered the plucky boy to the echo. It was Canton night at the Motordrome and marked the initial appearance of Holsinger, of Canton, and Witherspoon, of Cleveland, in a two-mile match race. Summaries:

Two mile amateur for 7 h. stock machines.—Huntsberry, Indian, first; Henikman, Indian, second. Time, 1:29¾.

Pro. team, free-for-all, teams to split purse. Placed by points; first heat, four miles.—Gibson, first; Carslake, second; Knapp, third. Time, 3:00. Second heat, four miles.—Gibson, first; Seliga, second; Knapp, third. Time, 3:00. Third heat, three miles.—Gibson, first; Knapp, second; Seliga, third. Time, 2:12¾.

Two mile match.—Witherspoon (Cleveland) and Holsinger (Canton)—Witherspoon, first; Holsinger, second. Time, 1:33¾.

Eight mile pro invitation.—Seliga, first; Glenn, second; Armstrong, third. Time, 6:19¾.

Five mile consolation.—Smiley, first; Hut-

tinger, second; Armstrong out. Time, 3:02½.

Saturday, August 17.—Tonight's races were featured a fifteen-mile pro. event, the final of which was interrupted by Jupiter Pluvius, although all other events were run off before the shower came, which put the damper on the meet. Summaries:

Three mile amateur, for 7 h. stocks.—Huntsberry, Indian, first; Henikman, Indian, second. Time, 2:32.

Six mile pro., three two-mile heats, scored by points.—First heat: Gibson, Indian, first; Seliga, Indian, second; Carslake, Indian, third. Time, 1:29. Second heat: Smiley, Indian, first; Seliga, second; Carslake, third. Time, 1:28. Third heat: Seliga, first; Carslake, second; Smiley, third. Time, 1:28¾.

Eight mile, invitation, pro.—Armstrong, Indian, first; Standen, Indian, second; Glenn, Indian, third. Time, 6:15½.

Fifteen mile free-for-all, pro., two five-mile qualifying heats and final of five miles.—First heat: Seliga, first; Smiley, second; Gibson, third. Time, 3:50¾. Second heat: Armstrong, first; Huttering, second; Standen, third. Time, 3:48¾. Rain closed the racing for tonight at this juncture.

Sunday, August 18.—Tonight's races were thrilling throughout, especially notable being the marathon race of 26 miles, which proved a runaway for "Wiley" Gibson, in which event, Knapp blew up a rear shoe and toured around the motordrome in an uncertain manner. Standen was next on the program with a tire to go flat, but neither he nor Knapp fell. Seliga, while running a close second, had to give up in the eighteenth mile due to engine trouble. Huttering stopped for oil once and again stopped for engine trouble, but finally managed to finish in third place. Armstrong quit in the twenty-second mile, while Standen dropped out in the twenty-fourth mile and went in again to get fourth money. Huntsberry made a run-away in the amateur event.

LORAIN CLUB'S MEET.

LORAIN, O., August 17.—A crowd of fully 1,000 decorated the grand stand and track today when Referee McConnell called the start of the race meet of the Lorain M. C. Five mile open, 30.50—Kissig (Indian), first; Schafer (Indian), second; Engler (Indian), third. Time, 6:32¾.

Three mile novice, stock 30.50—Engler, first; Erving (H.-D.), second; Michaels (Indian), third. Time, 4:20.

Five mile stock, 30.50—Kissig, first; Schafer, second; Robbins, third. Time, 6:55¾.

Open, miss-and-out—Kissig, first; Austin (Excelsior), second; Hoffell (Indian), third. Time, 3:21.

Ten mile open—Kissig, first; Austin, second; Schafer, third. Time, 12:06.

Ten mile stock—Kissig, first; Schafer, second; Engler, third. Time, 14:08.

One mile time trial—Kissig, in 1:14¾.

GROUND ECCENTRIC CYLINDER.

GRINDING is delicate work but to grind an eccentric cylinder is work that practically every factory will refuse. When Victor Loughed, a Chicago experimenter, sought for a company to do this form of grinding in Chicago he was unsuccessful until advised to go to the Harley-Davidson Motor Co. in Milwaukee. Loughed took the work to the Milwaukee plant, where it was done perfectly, and in a short time he was again on his way to Chicago.

WARD WHITTAKER'S MASTER

Former Defeats His Rival in Fast Ten Miles at Salt Lake City.

SALT LAKE CITY, Utah, August 16.—The fans at the Wandamere Motordrome now know that Al Ward is Whittler's master on the big pie-pan. Ward had to ride last night to beat the local boy, but he had the nerve and the machine, and nearly lapped Whittler before the ten miles had been covered. He lowered the track record by 30 seconds, making the distance in 6:56¾. Both of the riders were cheered when they came on the track, and many fans thought that Whittler would trim Ward with his new machine. Ward took the lead at the start and rode low on the track. Whittler did not want to take the lead, so rode high. While he was up there, Ward got such a lead that he could not catch him. He gained on him each lap and at the end of the ten miles was three-quarters of a lap ahead.

The seven mile handicap for the big fellows promised to be the best race of the evening until McNeil fell on the south turn of the track. Ward and Whittler were riding from scratch, and McNeil, Bernstrom and Brodbeck had two laps handicap. Ward started in the lead, but was passed by Whittler in the first lap. Bernstrom fell out of the race, as his machine was not working right, leaving just four riders to compete. Ward allowed Whittler to keep the lead for about a lap and the two stars started out to lap the other men. They gradually drew away from the handicap men. McNeil was riding fine, keeping below the pole line. He tried to oil and as he did so, his front wheel hit the running board and his machine shot back on the track, throwing him off. He was none the worse for his fall, with the exception of some slivers and cuts. Just after McNeil's fall, Ward had a little trouble with his machine and withdrew from the race, leaving Whittler and Brodbeck to fight it out. Whittler lapped Brodbeck once, but was unable to make the second lap in the seven miles.

McNeil easily defeated Brodbeck in the first heat of the professional race for five miles. Bernstrom crossed the tape first in the second heat against McCall and McNeil again won against Bernstrom in the final.

Rognon had everything his own way among the B Class riders. Thomas did some good riding last night and threatened to beat Rognon out, but the going was too fast for him. The summaries:

Five mile, Class A. First heat: McNeil, Indian, first; Brodbeck, Merkel, second. Time, 4:10. Second heat: Bernstrom, Indian, first; McCall, Indian, second. Time, 3:53. Final heat: McNeil, Indian, first; Bernstrom, Indian, second. Time, 3:58.

Three mile, Class B.—Rognon, Indian, first; Duckworth, Indian, second; Thomas, Indian, third. Time, 2:20.

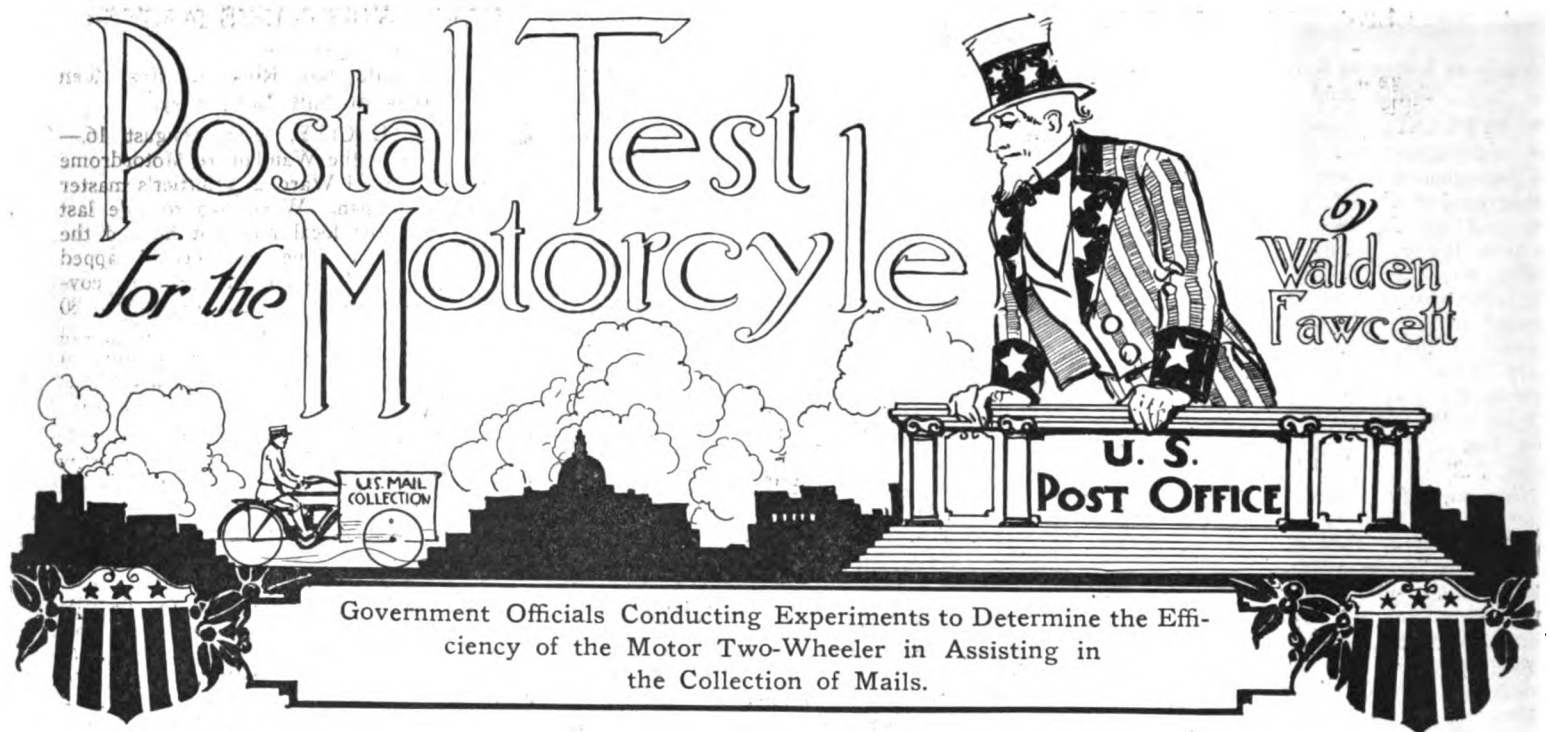
Ten mile match race.—Ward, Indian, first; Whittler, Merkel, second. Time, 6:56¾.

Five mile, Class B.—Rognon, Indian, first; Thomas, Indian, second; Duckworth, Indian, third. Time, 3:59¾.

Seven mile Handicap.—Brodbeck, Merkel, one lap, first; Whittler, scratch, Merkel, second. Time, 4:46.

SECRET TIME RUN.

PHILADELPHIA, Pa.—The Harley-Davidson Club has planned a secret time run to Stone Harbor, N. J., on Labor Day.



AN important and very extensive new field for the utilization of the motorcycle and the motor-tricycle will be opened if the United States Post Office Department is successful in a series of significant experiments now being conducted in the city of Washington. The present introduction of the motorcycle in postal service is not, it need scarcely be explained, a wholly new departure. For several years past the power cycle has been in use to a constantly increasing extent in various branches of the service, and while its adoption has not been quite so extensive in this sphere as that of the regular four-wheel motor car its advance has nevertheless been rapid enough to prove gratifying alike to manufacturers and motorcycle enthusiasts.

However, unusual significance attaches to the present move on the part of the Post Office Department because heretofore the principal utilization of the motorcycle has been by postal employees as individuals. To give a clear idea of the situation it is necessary to point out that Uncle Sam leaves it to many of his postal employees to provide their own conveyances. Due allowance is made in one way or another for the investment represented by these conveyances and for their upkeep, but the Department leaves the selection of the mode of locomotion largely to the individual so long as the

required work is performed in a satisfactory manner.

R. F. D. Carriers Set the Pace.

This class of employees in the various branches of the service have, on their own initiative, been using motorcycles or motor-tricycles for some time past. Thus we find many motorcycles in use by Rural Free Delivery carriers, especially those having lengthy routes, and in this field the motorcycle has proven an especial boon, rendering excellent service on roads that would be well-nigh impassable for a regular motor car. Similarly the motorcycle is to some extent displacing the bicycle in the work

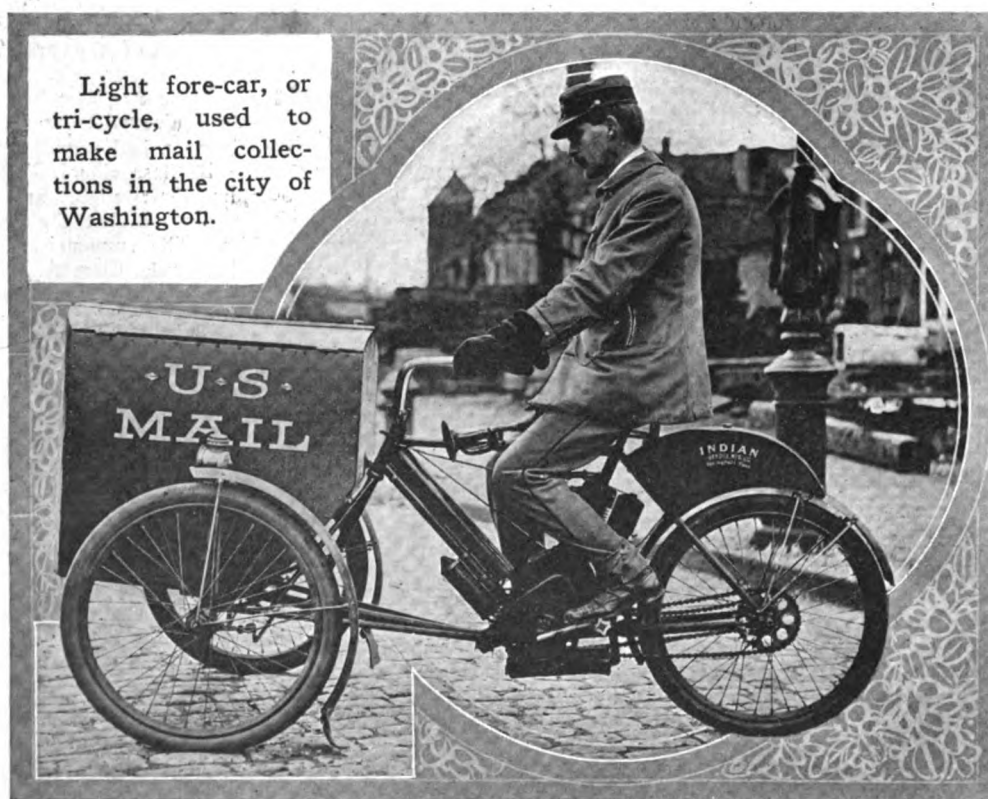
of the mounted messengers who distribute from city post offices and sub-stations the special delivery letters.

For a long time past, however, the administrative officials of the Post Office Department have felt that if there was one field above all others where the motorcycle might improve conditions it was in that of city collections. This branch of the postal business, be it added, is one which has become increasingly formidable of recent years. As American cities have grown in population, and as business has increased in the congested districts, the postal authorities have been at their wits' ends to devise satisfactory means of collection from the street

boxes and the mail depositories in hotels, office buildings, etc. It is not alone that there is a vastly increased volume of mail to be received from such sources, but there is a perpetual demand on the part of the public for more prompt handling of the mail.

Speed and Economy.

Under the conditions heretofore existing the collection of mail in the business districts of our cities has been accomplished by either footmen or by collectors in horse-drawn wagons. Both methods are somewhat slow, and the footmen are so limited in the amount of mail they can carry as to render the service inadequate and expensive. In the face of this dilemma it has seemed to the



officials that motorcycle collections would be ideal. Moreover, the smaller size of the motorcycles or motor-tricycles would render them preferable for such service to the larger motor cars such as are being employed to some extent for mail carrying in almost all our large cities. On top of the manifest advantages of the motorcycle for collection work in the business districts is the fact that it is at least the equal of the automobile for collections in the residence districts, whereas the lower cost of operation of the motorcycle is in its favor under all circumstances.

With such an incentive the Post Office Department officials began several years ago to make tests of motorcycles or motor-tricycles. Several firms have designed and constructed special models with a view to meeting the government needs. In physical characteristics, if it may be so expressed, these vehicles have been acceptable, and all the theoretical advantages claimed for the motorcycle in the postal sphere have been proven to exist in practice. The one fly in the ointment has been the difficulty in obtaining a product that would "stand up" under the tremendous exactions imposed upon it.

Must Withstand Hard Usage.

No person who has not investigated the subject can have any idea of the exceptional service required of a postal motorcycle or the hard usage to which it is subjected. In ordinary practice one of these machines is required to stop and start from 300 to 900 times in the course of a day's work, and must, in season, of course, be exposed to the most severe weather conditions. Then there is the further circumstance that the operation of such motorcycles must, perforce, be largely in the hands of inexperienced riders, or, at best, riders of comparatively limited experience.

Indeed, it is probable that there would now be in service in the postal establishments of our large cities hundreds of motorcycles or motor-tricycles for mail collection if any manufacturer could have evolved promptly a "foolproof" vehicle. Nothing less will answer. Under the exigencies of our postal system a given collection route is covered at different times by different men—mayhap in the case of sickness or emergency a "green" substitute, wholly unfamiliar with the work may be detailed. Thus it comes about that not infrequently a postal motorcycle will be entrusted to the tender mercies of an operative who knows no more about it than he has been able to master in a hurried lesson of instruction. Doubtless the time will come when every postal employee eligible for collection work will be thoroughly schooled in motorcycle operation and repair just as he is in any other line of duty, but in the meantime the motorcycle has had to bear all responsibilities.

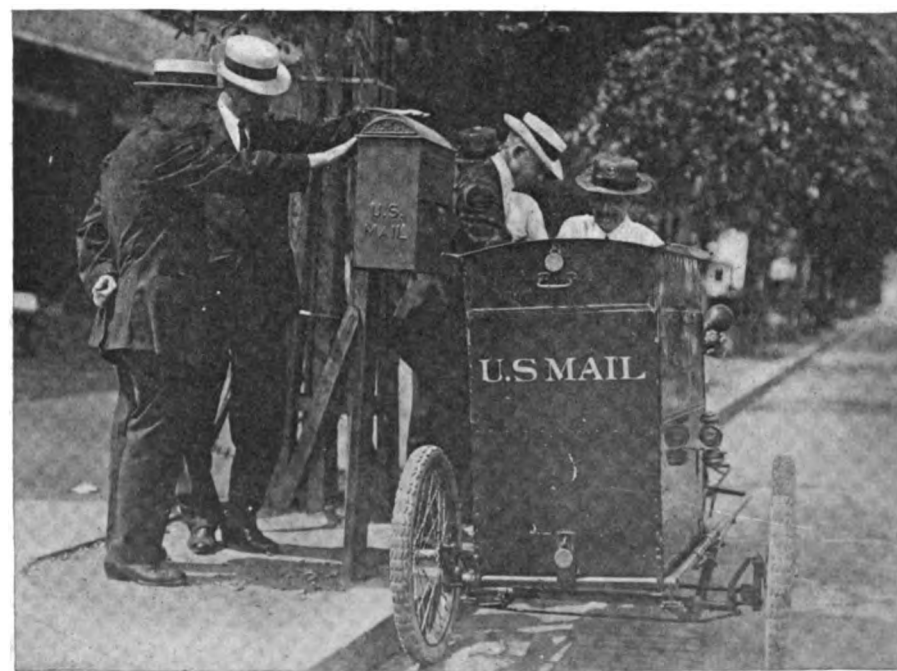
New Tests Are Encouraging.

Within the past few weeks the problem has been brought nearer to solution than ever before. The postal officials have been conducting a new series of tests and experiments at the national capital, with a special type of machine, and the outlook is more hopeful than at any time in the past. Not only does the motorcycle itself represent improvements, but the officials in charge

have learned some things by their past experience. For instance, it has been the custom to keep mail-collecting motorcycles in practically continuous operation for 16 to 18 hours per day, allowing little or no time for overhauling or repairs. The officials have now come to the conclusion that infinitely better results might be expected if two ma-

cycle than with the ordinary machine, for it is no slight chore to push up a hill a vehicle loaded with 450 pounds of mail, the carrying capacity of the latest motor-tricycle submitted to the government for test.

After all, however, the most notable promise of the present experiments arises from the fact that the postal motor-tricycle



Testing the efficiency of motorcycle mail collections.

chines instead of one were provided in each instance, allowing for the overhauling of one machine while its alternate was on the road. It is felt, too, that a tremendous advance has been made with the introduction of a two-speed motorcycle. The advantage is far greater in the case of a mail motor-

cycle is being tried out in conjunction with a new type of street letter box, the latter comprising one of the most important inventions taken up by the Post Office Department in some time. Of course the introduction of this new type of letter box has no direct bearing on the motor-tricycle itself

(except that the vehicle must be specially built to operate in conjunction with it), but it does have a very important indirect influence in enabling motorcycle collection to quicken mail handling. Indeed, this new letter box may be said to be the one adjunct that has been lacking to bring about the millennium of motorcycle mail transfer, provided the manufacturers can perfect virtually unbreakable van outfits.

How the New Box Helps.

The new street letter box is of the drop-bottom variety, and the street box and the postal motor-tricycle are so adjusted in height that when the machine has been placed alongside the box and the bottom is dropped there is provided, in effect, a continuous chute through which the letters slide from the box to the metal body of the vehicle. The scheme will save time under all circumstances and the gain will be tremendous in the case of boxes, such as those in the business district, where there is almost always a heavy accumulation of mail, the removal of which by hand is a tedious operation.

As has been said, the body of the motor van outfit must be specially constructed to conform to the requirements of the operation of this new style box, but the design does not in any sense interfere with the employment of the vehicle for collections from street boxes of the ordinary type. A brand new feature of the latest postal motorcycle is a locked drawer at the top of the mail compartment. This is designed for safeguarding registered letters and parcels which may be collected by the postman on his rounds.

The saving that would ensue from the adoption of motorcycles for mail collection has not as yet been definitely worked out from the data obtained during the current experiments, but it is known that it will be tremendous. For instance, the average mail collection route for a horse and wagon (taking the average of cities throughout the country) is about 33 street boxes, and the average time for making collections on such a route is said to be close to two hours. Contrast this with a recent performance of the mail motorcycle now under test

which made collections from 97 boxes in a total elapsed period of 1 hour and 25 minutes. Conservative estimates indicate a mail-collecting motor-tricycle should do at least three times the work of the most efficient horse and wagon outfit.

Plan to Lease Motorcycles.

There has been some expectation in the trade that the Post Office Department, if it formally adopts the motorcycle for mail collections, will purchase the machines outright, but the present sentiment in the Department appears to be in favor of a leasing arrangement such as exists with reference to postal automobiles in certain cities where the motor cars have been introduced for conveying carriers to their routes, substation work, etc. Under this plan a local firm leases motor vehicles to the Department by the month or year at a fixed rental and assumes all responsibility for the maintenance of the vehicles in serviceable condition, the provision of new tires as needed, etc. At least one motorcycle manufacturer is now at work on a design that will still further specialize the machine with reference to postal requirements. For instance, the rider's seat will be placed farther forward than in the regulation models, thus rendering it possible for the postman to unlock a street letter box without dismounting.

TWO-DAY MEET.

AUGUST 24 and 25 are the dates set apart for the two-day meet of the Rockford (Ill.) M. C. meet at the mile dirt track in that city, Saturday's events will consist of a three-mile novice, a 10-mile pro., a 10-mile open trade, and a 50-mile club championship event. Sunday's program has three 10-mile events, a 5-mile trade open, a 15-mile pro., and a novice and five-mile stock pro., with a 15-mile free-for-all.

COULDN'T COMPETE WITH DEALERS IN TORONTO.

THE T. EATON COMPANY, LTD., the big departmental store of Toronto, has closed out its motorcycle business, for the reason that it found itself unable to follow up inquiries in the same manner as the exclusive motorcycle dealer.



READING from left to right in the photograph are W. J. Ruhle, Roy Bowser and Geo. F. Puls, all entered for the Manufacturers' Association six-day run, which was called off for "lack of interest." Their ire grew successively when the run was first cut down to three days, postponed and reached its climax when it was finally called off. They later consented to smile for the photographer, with the above result.

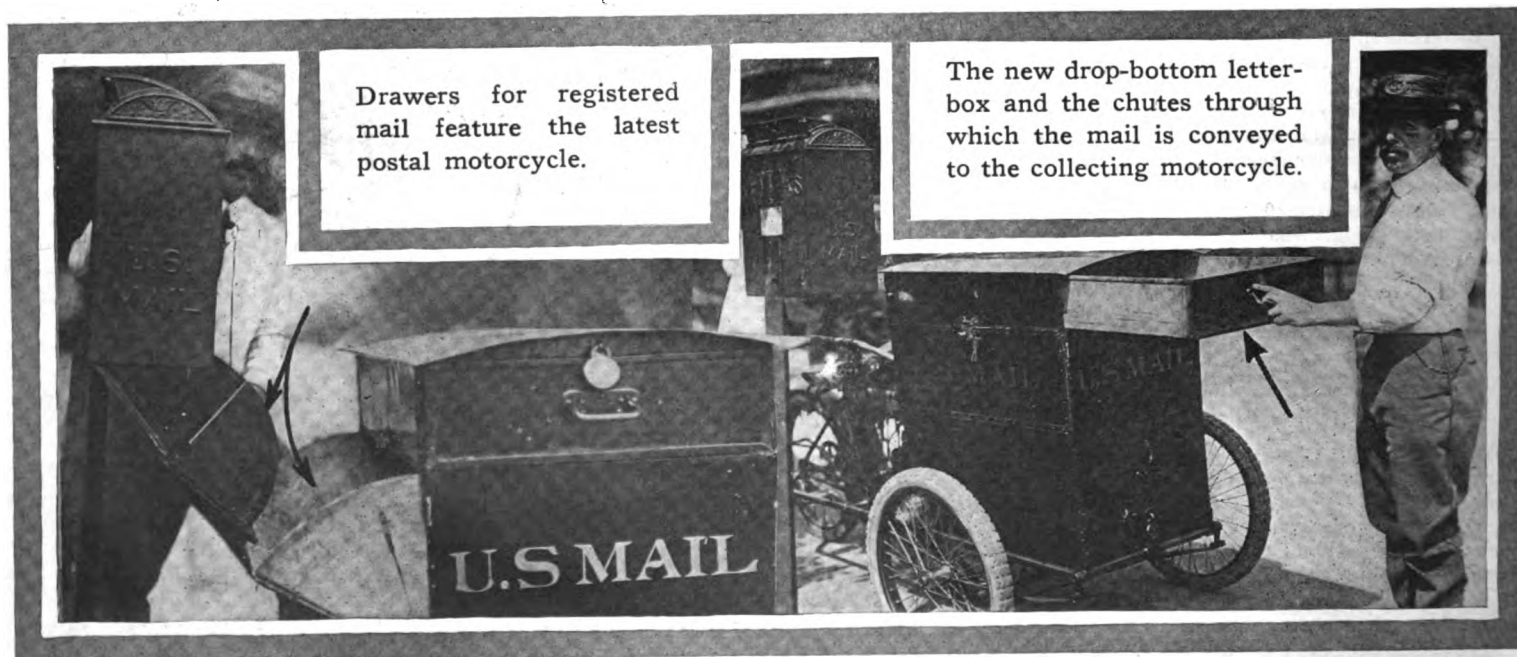
WINS PRELIMINARY RUN.

F. VILLEMUR won the preliminary run of the Escanaba (Mich.) Daily Mirror's road race between Escanaba and Hyde on August 12. The riders were started in three squads, the twins being despatched first. Villemur covered the fifteen miles in 18¼ minutes on his Indian twin, with Charles Brady, single Indian (second squad), second in 24 minutes flat. Fred Fournier, single Indian, and Max Liedtke, Harley twin, took third and fourth places, respectively, their times being 24:35 and 26:45.

PARADE, BARBECUE AND RACES.

THE Chicago M. C. has completed elaborate preparations for the race meet and barbecue to be held Sunday, August 25, at Riverview Park Motordrome. In addition to several amateur races there will be several events for professional riders. There will be a parade from the clubhouse at 9 a. m., and a barbecue at the Motordrome at noon. Races will be held in the afternoon.

TACOMA has added another "Indian" to its police squad, thus making the number of machines in use by the city five Indians and one Merkel.



WARD KEPT HIS WORD

By Winning in Straight Heats from Fred Whittler in Hard-Fought Match on Wandamere Bowl.

SALT LAKE CITY, Utah, August 3.—Al Ward's promise to defeat Fred Whittler in their initial meeting in a match race, was kept last night, when the little star at Wandamere won two straight heats. He not only trimmed Whittler, but smashed the track records for one mile and six miles. This feat was accomplished in the final event over the six-mile route. Ward completed the distance in 4:10½, which lowers his own time for the distance fourteen seconds. The timers declare that he rode the last mile in 39:4, which was over a second faster than any mile has ever been ridden on Wandamere motordrome.

In this event Ward and Whittler outclassed the rest of the contestants, and when the fifth mile had been ridden, they had lapped Bernstrom, Brodbeck and McNeil. Brodbeck and McNeil were fighting hard for third and fourth places. McNeil was ahead when Ward and Whittler finished, and slowed up, thinking the race was over, but on account of being lapped they had one more lap to go and Brodbeck won third place, after McNeil had lost his lead by shutting off at the tape. In the first heat of the match race, Ward took the lead and held it throughout, Whittler refusing to go in front. Whittler made several attempts to get by during the finish of the race, but the Indian rider always seemed to have something left.

In the second heat, Ward was compelled to go in front again and a great deal of jockeying was done. Ward almost stopped in an endeavor to get Whittler in front, but Whittler followed suit and stopped too. Then Ward went out with Whittler on. At the beginning of the fourth mile, Whittler passed Ward and cut him so close that he was compelled to use his cut-out. By so doing, Whittler gained quite a lead on him, but only held it about a lap, when Ward passed him. They rode side by side for the last mile, but Whittler was unable to get by.

McCall was first in the point race, finishing with nine points; Duckworth and Rognon tied for second place with four points. McCall easily outclassed the field in this event, winning all three heats. The five-mile three-cornered race ended in one of the finest finishes ever seen on Wandamere. After a hard fight, McNeil won, with Brodbeck second and Bernstrom third. They were so close at the tape that it was difficult to tell who won.

Two-mile point race; first heat—Won by McNeil (Indian); Rognon (Indian), second; Duckworth (Indian) third. Time, 1:31¾.

Second heat, three miles—McCall (Indian), first; Duckworth (Indian), second; Thomas (Indian), third. Time, 2:17.

Third heat, four miles—McCall (Indian), first; Rognon (Indian) second; Duckworth (Indian), third. Time, 3:10¾.

Final points—McCall, first, 9 points; Rognon and Duckworth, tied for second place, 4 points; Thomas, fourth, 1 point.

Four-mile match race; first heat—Won by Ward (Indian); second, Whittler (Merkel). Time, 2:52.

Second heat, five miles—Ward (Indian), first; Whittler (Merkel), second. Time, 3:40.

Five-mile, professional—McNeil (Indian), first; Brodbeck (Merkel), second; Bernstrom (Indian), third. Time, 3:44¾.

Six miles, open—Ward (Indian), first; Whittler (Merkel), second; Brodbeck (Merkel), third; McNeil (Indian), fourth. Time, 4:10¾.



W. W. Ours, of Clarksburg, W. Va., who holds the State track record.

BALTIMORE TRACK

Promoting Company Incorporated—A Three-Lap Saucer Will Be Constructed.

BALTIMORE, Md.—The movement started last winter to build a motordrome in this city has been revived by a new set of promoters. A company was formed last week, to be known as the Baltimore Motordrome & Amusement Company, with a capital stock of \$75,000, divided into \$25,000 preferred and \$50,000 common stock. The officers of the company are C. L. Clayton, president; F. W. Sandruck, vice-president; Irvin Sandruck, treasurer; George A. Rossetti, secretary; Louis McKim Kines, attorney.

The company plans to erect an amusement park accessible from all parts of the city. The bowl will be three laps and the flat part of the track will be wider than those now being constructed, so that running races may be held. The center of the plant will be converted into an athletic field. Tiers of seats will encircle the saucer, and capacity for 15,000 to 20,000 persons will be provided.

The selection of a site will be left to a committee, which will be appointed shortly. Six available sites are now under consideration. Tentative plans call for popular prices.

FOUR FINISHERS IN TACOMA CLUB ROAD RACE.

BECAUSE of the heavy roads caused by recent rains, but four motorcyclists finished with perfect scores in the race to Hoquiam, under the auspices of the Tacoma M. C.

Fourteen riders started from Tacoma at 6 o'clock on the morning of August 11, undaunted by the falling rain. Of this number but seven made the round trip.

Those who finished with perfect scores were Elmer Bergstrom and Edward Berreth, on Merkel machines, and J. E. Bunker and Edward Nelson, on Pierces. Ray Day and Ray Packard, on Merckels, and Arthur Whisner, on a Harley-Davidson, made the round trip in good time, but failed to get perfect scores.

The Hoquiam Motorcycle Club members met the endurance riders, treated them to a splendid luncheon and accompanied them part way on the return trip to the "City of Destiny," where the riders finished at 6:30 p. m. and enjoyed a well-earned rest.

THAT MISPLACED COMMA

It Was Detected in New Racing Rules at Columbus, But Thornley Settles All Doubt in Letter.

IN the letter printed below Chairman Thornley, of the F. A. M. Competition Committee, calls attention to a correction in the placing of a comma in the new Federation regulations governing the classification of competitors. The misplaced comma, as the chairman's letter explains, was detected and properly placed during the session at Columbus, but let the discussion over it appears to have raised a doubt in the minds of a few race followers, and the following communication is intended to make the situation perfectly clear. The chairman's letter follows:

"Owing to an error in punctuation which was corrected at the time the new classification of competitors was finally passed at Columbus, it would have appeared (had not the correction been made) that the new classification turned all riders professionals automatically who were connected with the trade. This is exactly what the new classification of competitors does not do. A man who is connected with the trade can retain and does retain his amateur status as long as he does not compete on tracks where the public is charged admission. The minute a man who is connected with the trade directly or indirectly; or in other words, a man who, under the old classification would have been listed as a trade rider, competes on a track where the public is charged admission, he automatically turns himself a professional. Men connected with the trade can compete in road events without losing their amateur status, and they can even compete on race tracks where the public is not charged admission. I mean by that, that if a couple of men connected with the trade happen to go to a local track and have a little "brush" where the public is not charged admission in any manner, shape or form, these men would not be turned professional. This classification is going to be rigidly enforced, but we do not propose to take advantage of technicalities. If there is any doubt as to whether the public is charged admission, either directly or indirectly, as at county fairs, the rider will not be given the benefit of the doubt, but in every case will be turned professional."

SPECIAL MATCH AT BRIGHTON.

RALPH DE PALMA, the well-known automobile racing driver, and David Bruce-Brown, also a king of the road, will meet in a match race at the Brighton Beach Motordrome on Thursday night, August 22. They will bestride two-wheelers, temporarily deserting the Mercedes and F. I. A. T. cars for their former flames. Before De Palma took to the automobile he rode in a number of motorcycle contests and the same can be said of Bruce-Brown. The match is looked forward to with great interest throughout automobile and motorcycle circles.

LORAIN RACES.

SEVEN races made up a program given at Lorain, Ohio, on Saturday, August 17, under the auspices of the Lorain Motorcycle Club. The meet was staged at the Lorain Driving Park.

ENGLISH NOTES

BY BRITISHER

Scottish Trials Put Participating Machines to a Most Severe Test, Particularly in Hill Work—Armstrong Three-Speed Hub Does Well—The James Two-Speed Machine.

I AM just back from a thousand miles jaunt accompanying the Scottish Trials, and have witnessed a run which ought to go down to history. It is the first trial I have ever been through in which the men have never felt nervous about the hills. Scottish hills never underdo the job. There are no rich residents to be taxed heavily for improvements, and the most eager surveyor has to confine his annual expenditure to a mere pittance, since in the Highlands he must draw his rates from a few crofters, farmers and fishermen, aided by small imposts laid on a few scattered mansions and summer hotels. As a consequence he can do no grading. Where an automobile road is needed, he takes the winding cart track which the farmer's horses have scarred over moor and fell and mountain, widens it a shade at the corners, and chucks a few cartloads of local stone rubble on the softer bits. Thus Scotch mountain roads are simply dirt tracks of precipitous gradient, with cairns of stones, piled on any parts which get soaked by drainage torrents in the rains; reefs of living rock jut up through the surface, and winter rolls down rubbish off the slopes. The promoters of this trial are less tainted with trade cautions and interests than any other committee; they are out to make a sporting trial, and they don't care if they get only twenty entries. But their event got such a reputation for sportiness, and won such advertisement for the one or two firms who have supported it in the past, that this year the British trade was compelled in self-defence to support it, and seventy starters were procured.

The Hills.—Well, these dashing organizers crowded into their 1,000-mile ride every bad hill that was within a hundred miles of a hotel big enough to house our caravan at nights, and in particular they put us up three hills which were always thought too bad for the automobile trials. If a hill is bad for an automobile, it is worse for a motorcycle, since the latter bucks about more on bad surfaces, and prefers a faster gait on grades. The week wore on, and by Friday night practically all the men had stormed up all the hills, and though some fifteen of the seventy had dropped out through accidents due to careless driving over such dangerous roads, thirty-two of the remaining fifty-five could still show clean sheets and perfect scores. This marked the promoters a trifle, and they took the somewhat objectionable course of revising the last day's trip, and inserting a hill always regarded as too severe to form part of any competition. It is the northern side of a very famous hill indeed, Amulree, and is variously known as

"Amulree's backstairs" or "Kenmore." It is three miles long, and starts off at right angles out of a narrowish road. Its difficulty is not so much the gradient as the turns, though about fifteen of its "steps" include longish patches of single figure gradient strewn with stones and crossed by rock-reefs. But the corners are nightmares. They number about a dozen; the track is excessively narrow, and two of the worst corners are incredibly acute, besides being heavily carpeted with loose stones, and jutting slabs. Rather to the disgust of the officials not a single man was balked by want of power. Several men fell at the bends, others hit the rock-slabs, bucked straight up into the air, switched off, and came down flop, but we all went up in quick time, and most of us non-stop, just putting out a leg to steady the machine as it began to rear or wobble after a frightful wrench on a bend. The triumphant ascendancy of the 1912 variable gears was complete. Of all gears the Armstrong three-speed hub was the chief victor, being used on a majority of the machines competing, but the similar Sturmey-Archer hub, and several makes of two-speed were almost equally successful. Amongst other achievements, excellent performances were recorded by two makes of lightweight, two cyclecars and two sidecars.

New Machines That Made Good.—A "cyclecar" is a three or four-wheeled vehicle on cycle lines, defined to sell at \$500 or less; they weigh less than 6cwt. and have an engine not exceeding 1,000cc. The pair entered are

known under the title of "G. W. K." and they have a friction disc drive. Many a fat fortune has been dropped in trying to apply this transmission to automobiles; however badly it may fail on large cars, it evidently just fits a cyclecar, for these two machines did what none of the official automobiles—modern vehicles of high horsepower—could perform, and averaged legal limit round the trip, climbing all hills. The lightweights to do well were the $2\frac{3}{4}$ h. p. Douglas two-speeder (already described in my pages) and the $2\frac{1}{2}$ A. J. S., a single cylinder of 300cc. with vertical engine, and chain drive, two-speed effected by two countershaft friction clutches, and duplicated sprockets. Of the side-cars one was a luxurious 6 h. p. Clyno, with air-cooled twin engine, and automobile type gearbox with ratios of $4\frac{1}{2}$, 8 and 14 to 1. The other side-car's success was amazing, for it was merely a $3\frac{1}{2}$ h. p. Triumph, with three-speed hub. No sane man would take such an outfit on such a job, but its driver got it through. It is true that he had a dampish time on the hills, for he ran alongside up most of them, and generally his passenger was soon overboard as well, while once or twice they did a lot of pushing; but they got up the hills somehow, and then they used to make up time. The fair passenger faded into the well of the side-car chair, and the driver made his "tummy" parallel the tank, and so, carving off all wind resistance, they opened up the throttle, and let the engine hum downhill and along the level into control. One good tire trouble would have spoiled their sheet, but, as luck would have it, they sustained no compulsory stoppages at all, except for plugs and belts.

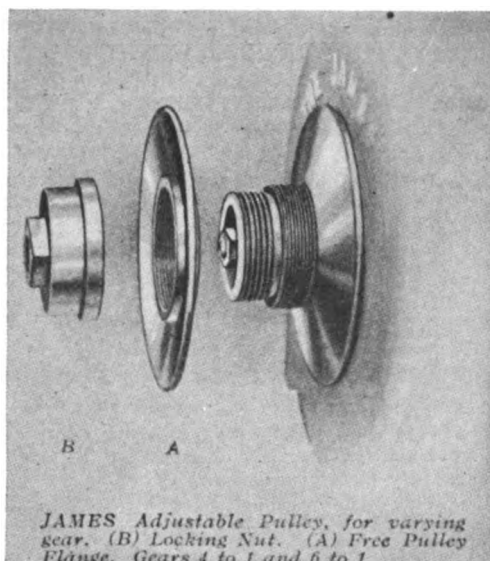
How I Struck It.—I went round in a journalistic capacity, riding a $3\frac{1}{2}$ h. p. Triumph with three-speed hub. I have one of those silly hubs on which the top ratio is indirect—here's a warning to your hub makers. Supposing it was wet, and I decided that a 4-in. engine pulley was the smallest my belt could grip on; in that case my gear ratios would be somewhat as follows: 3, $4\frac{1}{2}$ and $6\frac{3}{4}$, of which the 3 ratio is obviously pretty useless except for a downhill blind. My plan was to carry two belts, one long, the other short. I used the long belt most of the way, thus getting the 3, $4\frac{1}{2}$ and $6\frac{3}{4}$ ratios. When we came to a very bad hill, I screwed down my adjustable engine pulley to give a direct drive of $6\frac{1}{2}$ to 1, and my ratios were then $4\frac{1}{2}$, $6\frac{1}{2}$ and $9\frac{1}{4}$, which allowed my hot engine to pick up on a 20 per cent. grade after being cut out for twenty yards at a fearsome corner. How I envied some of my fellow competitors, who had a different make of hub, with which the



Our English correspondent starting off for the Scottish Trials on a 3-speed English Triumph.

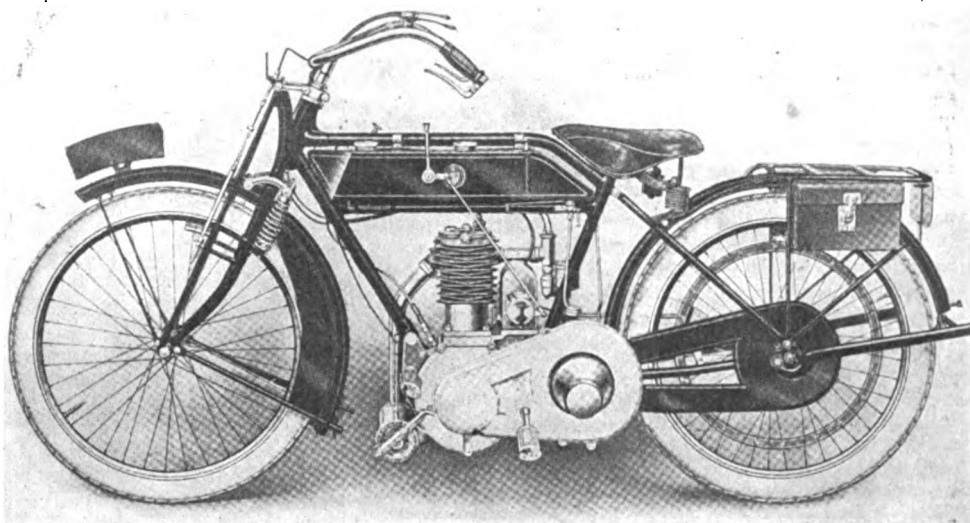
top ratio was settled by the pulley diameter; they could get ratios of $4\frac{1}{2}$, $6\frac{1}{2}$ and $9\frac{1}{4}$ with a four-inch pulley, whereas I dare not venture to put my ratios down unless the roads were dry. Let hub-gear makers appreciate the moral. A more interesting proof still of this point in design can be added. The man who got a side-car round with a three-speed Triumph had practiced over the course, using a hub on which the pulley ratio was the middle gear, and both low and top gears were indirect. He found he could not ascend the hills and at the last minute he substituted another make of hub, with its top gear direct, and both lower gears indirect, so using the very same gear ratios, but with a larger engine pulley. He now found he could climb hills on which he stuck with the former hub, proving that belt-slip with a small pulley is a greater evil than the friction implied by getting your bottom gear through two trains of pinions, as compared with one train. One side-car appeared with detachable and interchangeable wheels; the "knockout" spindle has been so cleverly applied that the two cycle wheels are interchangeable with the side-car wheel, and any wheel is removable in half a minute. He carried two spare wheels, shod with 3-in. tires, and lost no time at all with punctures. *Pour moi*, I used up two dollar tire repair kits, and was halfway through a third before Saturday came round.

Waterproof Magneto.—Here is a tip which may interest some of your boys. The new magnetos, alleged to be waterproofed, are not genuinely so, and four of us found it out in a real Highland drencher, when water got into our armatures through the paper washers used to joint the aluminum plates which close the ends of the horseshoe magnets. I had a rougher time still one day. My engine stopped as if it had been shot. I got down, and tested the spark—all O. K. Spent twenty minutes fiddling round with valves, carbureter, etc., and finally decided I must have made a bloomer, and re-tested the spark. No glimmer of one this time. Plug all right; cable all right; magneto contact-breaker all right; high tension brush all—hello!—where's its business end? Half the brush had disappeared into the intestines of the magneto, and the rain was coming down like a cloudburst. I was on the top of a desolate moor, 2,500 ft. above sea level, mist blotting out everything. Evidently I was getting intermittent shorts from the missing bit of brush. The last thing I wanted was to dismantle that magneto with so much wet around. I laid the machine flat on the sodden earth, and fished through the brush hole with a bit of wire; I played the post-office thief's trick, and angled for those bits with a piece of wire tipped with tire solution—no use. Finally I made a tent by laying my mackintosh across the carrier, squatted under its skirts, and took the mag to bits. But, alas, I failed to keep it dry, and when I had recovered the bits, there was still no spark. Finally I pushed a mile to a cabin, and dissected the mag once



more in a small horsebox full of turkeys and manure. This time I got her going, and we flew some till we caught up with the boys. But nowadays we carry shields over the waterproof magnetos, just the same as we did with the vulnerable type of 1911.

The James Two-Speed Side-Car Hauler.



The James' enclosed chain-driven two-speed model.

—I append cuts of a typical 4 h. British machine, heavily built throughout for the purpose of hauling a side-car. The engine dimensions are 86 mm. x 99 mm. and the drive is by enclosed chains throughout, the cases being split vertically, and instantly detachable by spring-snicks, though well-silenced from the chance of rattle by rubber pads. The gearbox is of the normal double dog clutch size, which is everlasting in wear, the first points to go being the keys holding the sprocket mountings, which require renewal after 5,000 miles or so. The boss on the near end of the countershaft contains a multiple disc free engine clutch, which is elastic enough to allow a total weight of 700 pounds to be re-started from rest on a grade of 10 per cent. (using the low gear, of course). The side-car connection lugs are brazed on to the frame of the motorcycle in correct positions, whenever so specified for passenger work, and the side-car can be attached or detached in a couple of minutes.

the next check without penalty is thereby eliminated.

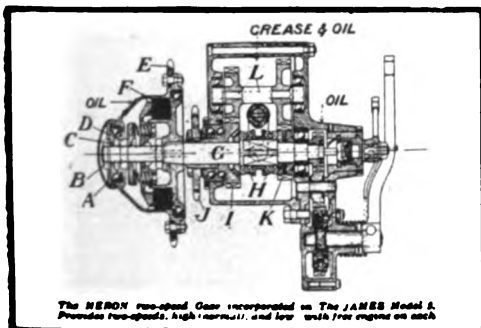
2. Machines are scrutinized by independent amateur experts at the finish, and penalized for any defects, lost brakeshoes, bent foot-rests, poor compression, chafed wiring, and the like.

3. A single failure on a test hill disqualifies for a gold medal. Failure is strictly interpreted. A clean ascent must be free from legging to buck up a conking engine over a bad knuckle, from trailing the feet to steady-ing the balance on a hairpin bend, and from pedal assistance.

4. The spare parts carried are limited both in number and in character.

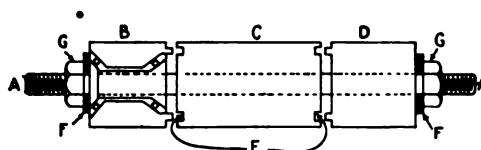
5. Two severe hills have to be climbed at less than twelve miles per hour on top gear.

Indian Victory.—The team of three 7 h. Indian machines ridden by G. E. Cuffe, Alan Hill, and J. R. Alexander, has been awarded the special prize for the best team perform-



ance in the Scottish 1,000 miles Trial. This reflects great credit on the Hendee factory, since fifteen teams were entered, representing the cream of the British industry, with the exception of the Triumph Company. Oddly enough, the Triumphs had the prize at their mercy if they had nominated a team, but they were unaware up to the start that three of their machines were entered. They sent no trade men, but three amateurs started on Triumphs, and all secured gold medals, whereas, owing to Cuffe's encountering a bad smash and continued tire troubles, he dropped sixty marks on the last two days. Alexander and Hill both recorded perfect scores. Against this patch of luck, due to the non-entry of the Triumph team, I must add that two of the Triumph men failed on all the worst test hills, whilst the Indians toyed with the fierce grades, and showed convincing mastery in picking up from a standstill after rounding acute V zigzag bends on terrific grades. Alan Hill was the only Indian brave who had a nasty passage. As he negotiated the double bend on the Devil's Elbow, the crux of the highest climb in the British Isles, he took a bumping football charge from two non-competitors who were rashly descending with inferior brakes; the smash left half his handlebar hanging by a thin skin of metal, and disorganized half his grip control. This is the only time that Alan Hill has blest his lameness, for having a game leg he always carries a walking stick strapped to his machine, and from this he jury-rigged a steering bar, and finished. On the very last check of the week his back cover blew to smithereens, and he had to take out his back wheel and fit a spare. The Scottish policemen of the Linlithgow district are still searching for him; the holiday crowds were out to welcome the regiments back from camp, and Alan roared through them with his cutout open and his hooter barking at sixty miles an hour, and just got in on time to win the team prize for the Indian crowd. His pace prevented the dazzled cops from reading his number. All's well that ends well.

Detachable Wheels for Motorcycles.—A by-road of design at present excites huge interest over here, viz., the perfection of detachable wheels for motorcycles. At first sight it may seem odd that a motorcycle should need a detachable wheel; 26 x 2½ in. covers are standard on this side, and after a little riding the beaded-edge type becomes as elastic as a kid glove, and can be whipped off by the fingers, while the modern solutions which dry as fast as gasoline and stick closer than a brother, have simplified puncture repairing until the clumsiest novice can put on a patch that won't peel or lift. To focus our opinions, we must remember what is the tire experience of an automobile owner on decent roads. His tires will run 3,000 miles without a single puncture, on an average. This because his car is not undertired. The average small motorcycle tire is extremely likely to puncture in the first 100 miles; a shard of broken glass may cut its brand-new cover in half; in 1,000 miles the corrugations will be worn down on the back wheel, and a canny rider will then swop his tires across; in 2,000 miles at the outside he wants a new cover for his back wheel, though the originals will run a lot further on the front wheel. Consequently he is often taking out his wheels, even if he has ordinary luck. Of course, if he strikes some putty inner tubes, or grinds out his driving tire rapidly because he does some



Detachable Wheel (Hub).

A A.—Central knockout spindle—main axle nuts not shown.

C.—Central hub carrying tire rim only.

E.—Dogs locking C to B and D, released by spring of forks when main axle nuts are removed from ends of A A.

B and D.—Side hubs, carrying sprockets, belt driven or belt drum.

F.—Fork ends.

G.—Nuts locking side hubs to fork ends.

fancy cornerwork or runs a sidecar in improper adjustment, the frequency of tire removals is enhanced. This because his machine is very plainly undertired.

The obvious remedy is to tire the machine properly by substituting either a heavier or a bigger cover. Some buyers make this a habit. I always order my roadster tourist machine without tires, and in lieu of the six-dollar cover supplied by the makers I fit a special heavy ten-dollar cover, from which I get 3,000 miles or more on the driving wheel. Why doesn't the English trade fit these costly covers as standard? For two reasons: First, because some of their competitors would undersell them by fitting the cheaper and lighter tire; and, secondly, because their customers are out for the lowest possible priced machine with a passable reputation. Consequently detachable wheels are the only way out on a commercial basis.

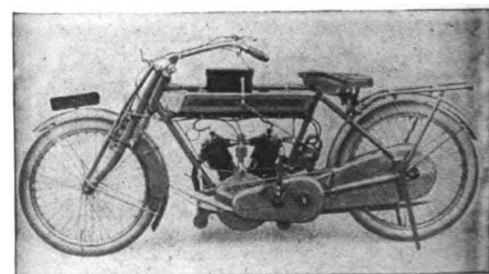
Until recently, the best solution was that adapted by the Rudge Company, whose back wheel came out quicker than anybody else's. You unhooked your belt fastener, ran a tube spanner on the two axle nuts, and hey, presto! the wheel dropped into your paw like a ripe cherry, for the only other obstruction was the belt rim brake shoe, and that worked outside the periphery of the rim. (The cones were specially cut a very tight fit on the spindle, so that they did not shift when you loosened the axle nuts.) Last year this solution looked like being a clue. This year it is as dead as a doornail, because epicyclic hubs are lumbering up our back wheels. In last year's Scottish Trials I three times fitted a new back cover in running time, and my watch showed the length of these three stoppages as eleven minutes, twelve and one-half minutes, and fourteen minutes, respectively. This year, praise the pigs—I never took my back wheel out; if I'd had to, it would have taken me *one and a half hours* to change a cover. Here's a list of the jobs: Put machine on stand; get out tools (five or six wrenches); unhook belt; unscrew brakeshoe; disconnect gear control; disconnect clutch control; loosen two chain stay axle hangers (similar to coaster brake lever arm); remove two hub control bell cranks from axle-ends; unscrew two axle nuts; remove grub screws and washers locking same; drop chain stay hangers; edge out spindle; take off old cover, plus security bolts to prevent cover from creeping under pull of engine on low gear at 3,000 revolutions a minute; fit new tire and tube; inflate; re-insert wheel, attach chain stay hangers; fit lock-nuts, with washers and grub-screws, adjusting each side till screws locked both dead tight; readjust bell cranks correctly to 1/32 in.; link up gear and clutch controls; adjust same to 1/50 in.; lower stand; restart engine. So the wheel removal problem has become once more acute; and especially so on

chain-driven machines, often having two band brakes and two chain wheels on the rear spindle. The method that seems likely to be adopted is a refinement of the knockout spindle. A 6 h. p. sidecar outfit competed in the Scottish Trials, on which the back and front wheels of the cycle and the side wheel of the car were all interchangeable. The driver carried two spare wheels lashed under and on the back of his chair, and with my own eyes I saw him change the back wheel and take the road again within five minutes, in spite of his having two band brakes and two sprockets on his rear spindle.

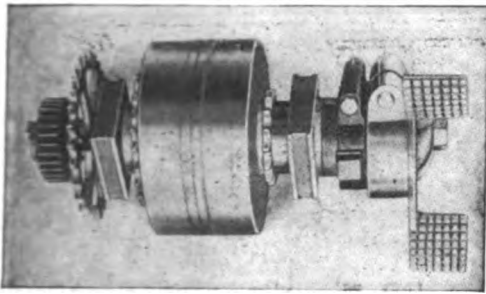
He uses springclip loose links in his chains, and snick-joints in his brake control rods. To each fork is rigidly bolted a small hub running on ball bearings. On the offside hub is attached a chain wheel or brake drum, and to the near side hub a chain wheel, brake drum, or belt rim, as the case may be. The tire rim is mounted on a third central hub, which lies between the two side hubs, and is held in position by a bolt which passes through all three hubs. This bolt does not support all the weight, but pulls the side hubs together, and affords frictional support between the faces of the hubs. The drive or braking strains are transmitted to the central hub by dogs cut in its faces, meshing with dogs cut in the corresponding faces of the side hubs. If the central bolt is tapped out, the forks spring a trifle, the dogs disengage, and the central or wheel-carrying hub drops out instantaneously. This type of hub is the coming thing for all machines with complex rear wheels, e. g., wheels carrying sprockets, brake drums, epicyclic hubs and the like. The old fixed type of hub is cheaper to manufacture, and will be retained on all machines using the two-step drive, for the removal of their back wheels is similar to that of the Rudge described above, viz.: unscrew axle nuts and unhook belt or chain, the sole rear brake working on the outside of the belt rim shoe. I should add that band brakes are defunct over here; our chain-driven machines mostly carry a dummy belt rim, embodied solely for braking purposes. This triple hub is immense for passenger outfits, as the one spare wheel can be used to replace any of the three or four contained in the chassis.

Surveyed Grades in Big Endurance Run.

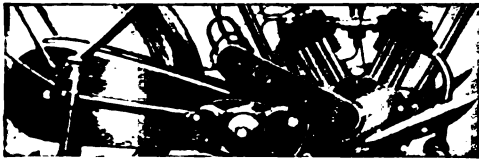
—The worst grades in the English 1,000 Miles are as follows: 1. Beggars Roost, 200 yards of 1 in 3½ (guaranteed survey); this is actually the only road to a small hamlet. The urban authority is ready to construct a side road, properly graded, but the owner of the land will not sell, unless road authority simultaneously constructs a second road on another slope for his private convenience. 2. Lynmouth, 300 yards of 1 in 4½ (guaranteed survey); very rough declivity, including a fearful corner.



The Clyno 5-6 H. P. two-speed.



Clyno Two-Speed Gear.



The Clyno Transmission.

The Most Popular British Sidecar Hauler.

—The Clyno cuts herewith show the machine which shares with the 7 h. p. Indian the chief favor of British riders as the power provider for sidecar outfits. Fig. 1 shows a near-side view of the complete machine—notice the totally enclosed chains—the aluminum shields pull off without tools; also the “kickstarter” on the countershaft, and the telescopic two leg stand, enabling the machine to be firmly propped on a sloping surface. Fig. 2 shows the countershaft complete, removed from the machine, with square brackets for locking in frame, pinion for kickstarter, sprockets for chains, rocking pedal for gear control, and case covering the two friction clutches of the two-speed gear. Fig. 3 shows the plant of the transmission.

RUN DOWN BY TRUCK.

A. W. DEVINE, of Roxbury, Mass., was run down by a motor truck in Boston just as he was about to start on the North-eastern Tour to Columbus on his Excelsior. His machine was wrecked but the rider managed to escape serious injury, although he was thrown nearly 25 feet. Devine states that he has a clear case against the truck driver and that he will take immediate action to recover damages. Being unable to obtain another machine on such short notice the rider was obliged to forego his trip to the convention city.

INJUNCTION DENIED.

VICE-CHANCELLOR STEVENS recently filed an opinion denying a preliminary injunction against the operation of the new motordrome in the Vailsburg section of Newark, N. J., asked for by residents of that neighborhood. The Vice-Chancellor based his denial of the temporary restraint asked for on a finding by the New Jersey Court of Errors and Appeals, but for which, he says, he should have thought that the prior decisions of that tribunal would have warranted a temporary injunction.

MAY LEASE BUILDING.

MEMBERS of the Lima (O.) M. C. have authorized their secretary to make an offer for the lease of the whole of the Pabst building on West High street, the club now occupying the second floor. The first floor is vacant and if the offer is accepted the Lima club will be exceedingly well equipped.

AT MIAMI WORKS.

A FEW of the recent visitors to the plant of the Miami Cycle and Manufacturing Co.: Beginning at the top row, reading from left to right: Arthur Davidson and Will Davidson of the Harley-Davidson Motor Co., Milwaukee; Secretary James W. Ash, of the Miami Cycle & Manufacturing Co.; Wm. F. Harley, of the Harley-Davidson Motor Co.; W. K. Aurandt, straw hat, Eastern salesman for the Merkel; Kelly R. Jacoby, president and general manager of the Miami Cycle & Manufacturing Co. Seated, with felt hat, S. W. Lippow, of the Milwaukee Cycle Supply & Sales Co., Milwaukee; light cap, Harry Mapp, of New York City. Third row, motorcycle cap, with goggles, C. E. Waltz, a civil engineer of Detroit who rides a Flying Merkel; Joseph P. Schantin, of Portland, Ore., who is touring from Portland, Ore., to Portland, Me.; F. W. Buchanan, Flying Merkel agent at Johnstown, Pa. Next row, A. P. Dick, Flying Merkel rider in Philadelphia; “Mac” Sheets, Central Western Coaster Brake Missionary; Charles Teasdale, of Elmira, N. Y. Bottom row, John G. Ledyard, Merkel agent



at Camden, N. J.; Stanley H. Smith, Carbon-dale, Pa., and James H. Mayo, Merkel agent at Reading, Pa.

AN R. F. D. CONVERT.

ELMER WARRINGTON, rural mail carrier out of Keota, Ia., intends to give the patrons on his route better service and save himself considerable time each day by delivering his mail on a motorcycle.

LONG DISTANCE TOURS.

RICHARD WARD and William Ward, Jr., of Camden, N. J., are touring New England on their motorcycles.

THE Allen M. C., of Allentown, Pa., held a special run to Lake Hopatcong, N. J., on July 28. The route was through Bethlehem, Nazareth, Easton, Washington and Hackettstown.

MOTORCYCLES are being used by officials at the Fort Collins, Colo., U. S. Experiment Station in conducting investigations throughout the State.

RETURNED THE MONEY.

TWELVE years ago this month, C. Brierly, of Detroit, was taken off a freight train at St. Thomas, Ontario, and was given 45 cents with which to buy a ticket back to London, Ont. A few days ago, Brierly, using a motorcycle as a means of transportation, stopped at the City Hall at St. Thomas and, seeking the city treasurer, paid him back the 45 cents.

GOOD TOWING TIP.

IN towing a motorcycle, a good plan is for the rider of the towed machine to wrap the rope once around the bar near the center, holding the other end in the hand. In case of a fall, the rope will come off and the rider will be saved from being dragged, or spilling the other man.

MOTORCYCLES FOR RANGERS.

FOREST RANGERS in Porterville, Cal., are hereafter to patrol their ranges on motorcycles instead of ponies. With the motorcycle the ranger will be enabled to cover between 150 and 200 miles a day, while 50 miles daily was the best average on the pony.

RESTRICTED TO GUARDSMEN.

IT is announced that the meet to be held at Syracuse by the National Guard and Naval Militia on September 14 will be restricted to riders who are members of such organizations, and that events will not be open to all competitors.

“DISGUSTING AND DANGEROUS.”

ROCKFORD, Ill.—Declaring the practice to be both “disgusting and dangerous,” Chief of Police Bargren will ask the city council to pass an ordinance prohibiting girls from tank-riding.

FOR ELECTION WORK.

ASSISTANT CHIEF OF POLICE FLETCHER, of Coffeyville, Kans., and his motorcycle were pressed into service to take the instructions to the board of Cherokee township. The election was held at the Winters school house. Mr. Fletcher made the trip out there in 25 minutes and returned in 15 minutes.

ONE of the objects of the newly-organized motorcycle club at Scranton, Pa., is to assist in the good roads movement.

DEKALB, ILL., has the first motorcycle “cop,” Officer Sid Rowe.



J. C. Reiter, a popular officer of the Dayton (O.) force, with his Merkel, ready to catch speeders.

International

Donald McKie

Tour

Part II

Through Virginia, Pennsylvania and New Jersey to New York

IT is astonishing the number of creeks the State of Virginia leaves unbridged, and in rainy weather they are certainly a great inconvenience to the people living around there as well as to the tourists. After several hours of the most uncomfortable riding, walking and running, we were glad to get out of Franklin County. We took the wrong road and found ourselves riding around the top of a mountain over bad roads and went through many hardships before getting back on the right route. If all motorcyclists will take our tip they will always go back to the right road as shown on their map, instead of winding through unknown forests trying to follow directions given by uneducated farmers, many of whom delight in sending motorcyclists on the wrong road.

Finally we got to Roanoke, Va. At the Roanoke Cycle Company headquarters, we met Mr. Webb, who showed us every courtesy. We rode on toward Natural Bridge, where we intended to stay a couple of hours. The time spent at this place will never be regretted. A charge of one dollar is made for sight seeing and it is well worth the price. The main road passes right over the natural bridge, but it is so wide that one cannot tell this when on the road. By railroad this place is almost inaccessible and any motorcyclist passing near should take advantage of the opportunity to visit this famous spot. The roads from Natural Bridge into Lexington were exceptionally good. We did not attempt to go any farther than Lexington as it was about dark when we reached that place. Accurate account of the creeks we forded between Roanoke and Lexington showed that there were nineteen of them, some large, some small, but a grand total of nineteen. Our mileage for the day was 97.6.

Pennsylvania Toll System.

Thursday morning we got started with the earliest cocks, having only 31 miles to ride before we struck the Staunton Pike. This was covered in short order and we had breakfast in Staunton. Just before entering the city we paid our first toll, five cents, and after that every five miles we had to stop and pay ten cents. No extra charge was made for the rider on the tandem. Think of paying two cents per mile for riding over roads on a motorcycle! The reason is that they are "corporation owned." There are 90 miles of this pike, extending right into Winchester, Va., up the Shenandoah Valley, with mountains in the distance on either side. From Lacey Springs a 20-mile detour in the mountains will bring one to the famous Caverns of Luray Cave, which in natural wonder are pushing Mammoth Cave in Kentucky for first place.

A slight shower fell about half way up the Staunton Pike, but this did not stop us, especially as it was soon over. We had been riding with throttles well open on the good road, and we needed gasoline at Winchester. We also purchased Indian oil from the agents, as our supply of two gallon cans was now exhausted. The National Highway from here leads via Charleston, W. Va., but the macadam toll roads going via Martinsburg, W. Va., right into Hagerstown, Md., will be found far better. We reached the latter place just about dusk and decided to spend the night there. Mileage for day, 171.4. It is worth while to mention that we paid out approximately two dollars each in tolls. At Shepherdstown, 15 miles out of Hagerstown, we crossed the Potomac river on a toll bridge. There a charge of five cents was made for each passenger.

Friday morning we left Hagerstown about 6 o'clock, finding the weather rather cool. We soon entered the State of Pennsylvania and passed Leitersberg, Waynesboro and Rouserville in the order named. Out of the last named we climbed a man's size mountain, but the road surface was excellent, barring the water breakers. Because of carrying an extra rider I had to ride rather fast and every time we hit one of the water breakers the machine would go into the air several feet. Soon we reached the National Park at Gettysburg. From Gettysburg the next town of any consequence is York, where we got gasoline and oil. Twelve miles further on we crossed the Susquehanna river on the Pennsylvania, R. R. bridge, at a cost of nine cents each. Two of us had been over the roads once previously and we noticed that we were paying toll on roads this time where we were allowed to go through free on the previous trip.

Over Good Jersey Roads.

For seven miles into Coatesville, Pa., the roads are the worst imaginable, with loose rocks making riding along there most disagreeable. Passing Coatesville, the roads improve and 25 miles out of Philadelphia they are very good. Here tolls begin again, though they are not quite as high as some of the previous ones. A couple of punctures delayed us somewhat and we were fifteen miles out of Philadelphia at dark. With lamps lighted we found it easy to ride into Philadelphia, and after hunting about an hour for a hotel that would take people in with our costumes, we approached a

motorcycle officer and he directed us to the Y. M. C. A., where we procured comfortable quarters.

We got away from Philadelphia about 1 o'clock Saturday afternoon and without the aid of a guide we had some difficulty in finding our way out. The roads to Trenton were very bad, with deep ruts where heavy automobiles had been running. After getting to Trenton, N. J., we had nothing but good roads, but the New Jersey roads have too wide a reputation for their superiority to require comment here. At Perth Amboy we took the ferry for Tottenville, Staten Island, and the seventeen miles of good road across the Island were soon covered. Then the St. George ferry carried us to the Battery. Fortunately we found practically no traffic on Broadway as late as 6 o'clock Saturday afternoon and made our way to the store of Bidwell & Conklin, where we stored our machines. The mileage for the day was 98.6.

On Sunday we took a short ride around New York, but did not leave until 4 o'clock Monday. We had as a guide up to Bridgeport, Frank Hart, the amateur champion. He was testing one of the Milford side-cars for the Hendee Mfg. Company and took Hudson, who had been riding on my tandem, in the side-car. Hudson is now very enthusiastic about the easy riding qualities of the basket. We spent Monday night at Bridgeport and will long remember the kindness of Stanley Kellogg, the Eastern distributor for the Excelsior. At night Mr. Kellogg took us for a spin in his well-tuned runabout, and otherwise treated us royally. Mileage for the day, 66.2.

About midday on Tuesday we started for Springfield, Frank Hart showing us the way out of the city. The roads were very good and we were sorry when we rode into Springfield, after covering 88.4 miles. We had passed through New Haven and Hartford, Conn., but did not stop at either place.

After it was all over, the trip from Atlanta seemed very simple indeed, but appeared quite different at times while we were actually performing it. It was plainly demonstrated that with good machines, a little nerve and sufficient stamina the trip can be made with a rider on a tandem attachment, which is certainly enjoyable because of the sociability feature. A little discussion of a certain point of interest surely impresses it on the mind more than mere observation. This point alone makes tandem trips worth while.

We had ridden 1,169 miles in a manner much more economical than it could have been done otherwise. It is rather difficult to keep accurate records going through the country and under the varying conditions,

but as nearly as we can figure we consumed only 17½ gallons of gasoline, making our average 66 miles per gallon. No record was kept of the oil consumption. The above refers to the machine with the tandem. No record of the others was kept, but it was not very much less.

The price of gasoline all the way to New York was 20 cents, with the exception of a few places where we paid from 15 to 18 cents. At Philadelphia it was selling at 10 and 12. On reaching New York we were greatly surprised to find it selling at 18 to 25 cents per gallon and at once attributed these exorbitant prices to some combination on the part of the various sellers. We had expected it would be as cheap in New York as it was in Philadelphia.

Coolidge, on the Indian, had two punctures, but there were none for the Thor. I had three. However, we regarded this small amount of tire trouble as entirely satisfactory. We left our machines in Springfield, much to our regret, and took the trolley for Boston. As far as we could see the roads from trolley they were excellent and many times did we regret not going on to Boston on our motorcycles. We then went to New York, attended to the shipping of our machines and other matters. They should always be handled by some forwarding agent and all instructions necessary will be cheerfully given when arrangements are being made.

We sailed on S. S. *Oscar II* on June 20 for Copenhagen, and this instalment of our story was prepared aboard ship on the way over. We are not pressed for time and it is our intention to see all that is worth seeing along our route before we again turn toward America. As we progress we will tell the readers of *MOTORCYCLE ILLUSTRATED* of our most interesting experiences and give all the practical information possible so that American motorcyclists may be given a broader insight into European touring conditions.

A UNIQUE FIRE.

A TRIUMPH motorcycle belonging to Bert Bastedo, of Toronto, was destroyed by fire recently, thanks to the tampering of some unknown person who disappeared completely after the incident. Bastedo had left his machine in the basement of the building in which he is employed, and as a safeguard, had disconnected the magneto wire from the spark plug. In his absence, the curious party had tickled the carburetor until it flooded, after which he attempted to start the machine in the usual way. The dangling magnetic wire sparked against the engine cylinder, igniting the leaking gasoline, with the result that the machine was burned up. The blaze was so bad that the fire department was called to extinguish it.

VIENNA POLICE NOTICE.

HOLDING that pedestrians are generally to blame for street accidents, the Vienna (Austria) police have issued a notice that a pedestrian crossing the street must do so in a direct line, taking the shortest path. Those caught walking down the street lengthwise and thus endangering their own safety will be first reprimanded and then fined, the sums inflicted varying from 38 cents to \$40, according to the nature of the offense.

ARMY EXPERIMENTS.

COLUMBUS, Ohio.—The General Service corps of the Ohio National Guard, stationed at Columbus, has started to experiment with motorcycles as a means of carrying messages while the guard is on field duty. The experiment was tried Sunday, August 4, when three riders, Corporal Kissinger, and Privates Pegg and Osgood, started from Columbus carrying a full line of equipment and accoutrements, including a shelter tent, for the camp in Richland county, a distance of 100 miles. The riders gathered data and will report to Major Jaquith, head of the signal service department of the Ohio National Guard, and Adjutant General Weybrecht.

DEMAND FOR NON-SKIDS.

THE demand among motorists for pneumatic tires with non-skid treads is greater at the present time than ever before in the history of the tire-making industry. Perhaps one reason for this is that manufacturers, during the past two years, have developed the non-skid style of tread with marked success. There is, however, a broader explanation for the present popularity of this type of tire. It pertains to other advantages besides protection against skidding.

Outlining these advantages and commenting on the popularity of non-skid tires, an official of the United States Tire Company says:

"The best evidence we have of the wide demand for non-skid tires is the fact that both our Nobby Tread and Chain Tread types are always sold up far in advance of our production.

"There are several reasons why motorists prefer the non-skid style of tire. In the first place there is the ever present protection against skidding. Furthermore, where the tread is raised, the user gets a much thicker and heavier wearing surface. This has the effect of increasing the mileage rendered by the tire. The manufacturer is enabled to place much more rubber between the tire carcass and the exposed surface of the tread than can be successfully utilized in the ordinary smooth type of casing.

"With ordinary usage a motorist should get hundreds of miles of service out of a non-skid tread before the tire wears down to the regular tread surface.

"Another advantage which motorists claim for heavy non-skid treads is that they reduce the number of punctures, throwing off sharp objects entirely or picking them up in such a way that they do not penetrate the casing or puncture the tube."

DETROIT DEALERS' RACE MEET.

DETROIT, Mich.—Despite the fact that no trade riders were present to lend that quality known as "class" to the proceedings, the motorcycle meet staged at the State Fair Grounds Sunday under the auspices of the Motorcycle Dealers' Association was successful.

M'Lean was the bright particular luminary of the meet, winning the unknown distance event, five-miles for fully equipped stock machines, and taking second from scratch in the twenty-five-mile handicap event. Darrell, with two firsts, was his closest rival for the day's honors. The summaries:

Ten-mile novice—Crissman, first; Darnell, second; Egan, third; time, 12½. Ten-mile handicap, 30.50 machines—Darnell (4 min.), first; Crissman (scratch) second; Egan (4 min.), third; time, 11:04½. Unknown distance event, 11 miles—M'Lean, first; Dougherty, second; Platte, third; time, 11:28½. Five-mile, fully equipped stock machines—M'Lean, first; M'Caffrey, second; Platts, third; time, 5:21½. Twenty-five mile handicap—Darnell (5 min.), first; M'Lean (scratch), second; Platts (3½ min.), third; time, 26:24½.

The twenty-five-mile handicap was the feature event of the afternoon. M'Lean passed Darrell two times and was rapidly overhauling him when the final tape was reached.

VISITED H. D. WORKS.

G. M. RICKETTS and Earl Miller, of Lancaster, Ohio, have completed a round trip between that city and Milwaukee, which they took to visit the Harley-Davidson factory. The trip was made practically in the rain, which fell in quantities every day they were on the road. In spite of the poor conditions of road surface encountered, they both had a successful ride, but Ricketts made the return trip from Springfield on by rail, owing to breaking his forks by falling into a chuck-hole. Miller made the 1,200 miles without trouble of any nature. Their best day's run was 300 miles, and the 110 miles from Indianapolis to Dayton was negotiated in 3 hours and 15 minutes. Both riders used Harley-Davidson machines.

SUCCESSFUL SEASON.

F. P. GRAVATT, of Atlantic City, N. J., reports that he has had an excellent season, having already disposed of thirty-five Flanders machines. Atlantic and adjoining counties are good Flanders users, and the remainder of New Jersey is reported most appreciative of the Pontiac product.



Motorcycle Police Squad in Oklahoma City, Okla.

A WEEK BY THE SEASHORE NEXT YEAR

Atlantic City Chosen For 1913 Convention of the Cycle Trades Associations—May Go to the Pacific Coast in 1915—Features of the Detroit Meeting

1913—ATLANTIC CITY.
1914—?
1915—THE PACIFIC COAST.

BEFORE leaving Detroit, the Parts Manufacturers voted unanimously in favor of holding the 1913 convention of the Cycle Trades in Atlantic City. Subsequently, at the joint meeting, Charles A. Persons suggested that the program-makers arrange for a whole week's entertainment, from Monday morning to Saturday evening. The proposal met with instant favor and Dave Smith, chairman of next year's general committee, promised to give it thoughtful consideration.

Although, of course, no official announcement has been made regarding the 1915 session, the fact that San Francisco will then hold a World's Fair has been responsible for no small measure of sentiment in favor of a trans-continental journey by special trains to the Golden Gate City, Los Angeles, and points of interest in Oregon and Washington. In fact, many of the visitors to the Detroit convention spoke with an assurance which could not have been firmer had the matter already been settled. The plan is one of such tremendous possibilities that the average prospective participant dares only to dream of it just now, although its realization in fact is considered by no means improbable.

The sixth annual convention of the Cycle Trade Industries passed into history a little less than a fortnight ago. Saturday evening, the 10th instant, saw the Cadillac, Detroit's favorite motoring hostelry, practically deserted. At least it appeared so to one of the left-overs, for without the two hundred and seventy-five cycle and motorcycle tradesmen, their wives and friends who had enlivened historic Detroit during four joyous days, the Cadillac and its environs seemed quiet indeed.

The convention was a notable one in the matter of attendance and the interest which attached to its program, the features of which, briefly summarized, were as follows:

Tuesday, August 6.—The sail on Lake St. Clair aboard the Steamer *Sappho*. Although many were then on their way to the convention town, more than one hundred took advantage of this opportunity to become acquainted with newcomers and to renew associations of former years. It was an excellent idea to open the festivities with a sail, bringing the entire crowd, under most informal circumstances, within the small compass of two boat decks. Similar arrangements should, if possible, be made for the Atlantic City gathering next year.

Tuesday evening.—Theatre party at the Temple.

Wednesday, the 7th.—Morning and afternoon sessions of the Motorcycle Manufacturers' Association. The re-election of President Coffman and other former officials, with the exception of Secretary Cox, whose resignation from the Pope Manufacturing Company made it necessary to select a new man. L. D. Harden, who succeeded to Mr. Cox's place in the Hartford company, was also elected to

Mr. Cox's former position in the M. M. A. That organization went on record as favoring a motorcycle exhibit at the Panama Exposition, and as endorsing the trans-continental relay race recently voted for by the F. A. M. A. committee was appointed to arrange for Chicago Show space, and it is not improbable that an independent motorcycle exhibit will be held, although there is no disposition to deliberately throw over the auto show crowd, provided only that the latter discloses the slightest inclination to deal fairly with the M. M. A. This prospect is hardly bright enough just now to call for any great enthusiasm.

Wednesday afternoon.—Informal reception for the ladies, of whom there were more present than ever before. Mrs. Surre, Mrs. Willis and Mrs. Fry received. Euchre was the order of the afternoon, prizes being awarded to the high scorers, and favors to all.

Thursday evening.—Annual bowling match on the Pontchartrain alleys. The parts and accessory makes won the team honors and W. B. Colburn, of the Pierce Cycle Company, first individual prize with a score of 181. Mrs. Keyser Fry, of Reading, with 84, carried off the distinction of being the most proficient of the feminine artists.

Thursday, August 8.—The Cycle Parts and Accessories Association voted in favor of holding next year's convention in Atlantic City, naming Dave Smith chairman of the general arrangements committee.

The jobbers reorganized with a large charter membership. F. I. Willis, of Indianapolis, secretary of the old organization, was chosen president of the new one.

Thursday afternoon was devoted to visits to the automobile-manufacturing plants of the Ford and Packard companies. Shortly before nine o'clock that evening, the steamer *Pleasure* left the foot of Woodward street for what was scheduled to be a moonlight sail. Luna was hidden somewhere behind a bank of clouds, but the perversity of the moon was of absolutely no consequence. Practically the entire crowd was aboard, and if anyone failed to enjoy himself, he had no occasion for blaming the party, which was jollity personified. This

event was easily the most pleasureable on the program.

Friday, August 9.—In the morning, a joint session of the cycle trades, Ralph D. Webster, of the Eclipse Machine Company, presiding. Addresses were made by F. I. Willis, Hearsey-Willis Company; A. B. Coffman, Consolidated Manufacturing Company; John W. Henry, Vim Cycle & Hardware Company, and J. Leo Sauer, publisher of *MOTORCYCLE ILLUSTRATED*.

Friday afternoon.—Auto sight-seeing trip through the city of Detroit and Belle Isle.

This brought the official program to a close. It had been an interesting one throughout, with a record-breaking attendance that was thoroughly representative. Those who had feared that the associations could not make good in Detroit were agreeably surprised. Surre and Smith, veterans in the art of entertaining, had



Jack Brandt, Geo. Sherman and G. W. Greiss.

again done great and clever work, and the results of their endeavors must have been very gratifying to both.

FALOR UNAVOIDABLY ABSENT.

IT is doubtful if any of those who were unable to attend the Detroit convention regretted his enforced absence more keenly than did S. A. Falor, of the Goodyear Tire & Rubber Company. Mr. Falor was ill at the time, having found it necessary to drop everything to seek recuperation in the north.

NEXT SESSION IN CHICAGO.

THE next meeting of the Motorcycle Manufacturers' Association will be held in the New Southern Hotel, Chicago, Wednesday, October 19, beginning at 10 o'clock in the morning.

ENTERTAINED BY DAYTON CLUB.

DAYTON, O.—Several hundred riders from Richmond, Cincinnati, Lebanon, Springfield, Troy, Columbus, Piqua and other Ohio cities were entertained recently at Eby's grove by the Dayton club. The entertainment was in the nature of a picnic, with the customary games and contests.

COSHOCTON, O.—The city council of Coshocton, O., has adopted an ordinance providing that no person under the age of 16 years shall ride a motorcycle or drive an automobile in that city. The ordinance also forbids the use of unusual horns and signals and provides a fine for the use of a muffler cut-out.



Left to Right—J. W. Spray, W. C. Roby, S. C. Hurley and R. M. Barwise.



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ABOARD THE SAPPHO

1. Dave Smith "in all his glory."
2. The cranberry grower essays a break-down.
3. Top picture—The ladies on the Sappho. Middle—Ferguson and a quartet of friends. Bottom—A few of the early arrivals to the convention.
4. J. C. Manternach "proposing" to H. Glenn Davidson.



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CONTINENTAL-ERIE HOSPITALITY

Thoroughly Enjoyed by Three-Score Jobbers and Others After the Detroit Convention

—The Program and Those Who Participated

CONTINENTAL and hospitality are evidently synonymous. The three-score jobbers who, after the Detroit convention, became for a night and a day the guests of the Continental Rubber Works, of Erie, Pa., are certain that the two words convey exactly the same meaning. The reception tendered by the Erie company served as a fitting climax to a delightful week.

There may be, somewhere in this old world, another host like T. R. Palmer, president and general manager of the Continental Rubber Works. But Mr. Palmer has no superior for—and there is no need for flattery here—a higher species of hospitality than that evidenced in Erie Saturday, August 10, is simply out of the question. "Ask the jobber—he knows."

Aye, the jobbers do know how Palmer, his fellow-directors and other Continental officials, in spite of a Weatherman whose wickedness was simply malicious, made happy their sixty guests, entertaining them royally at every turn, omitting not a single opportunity that afforded an opening for serving their guests.

The party left Detroit in three special cars attached to the nine o'clock train. From the very start, Messrs. Palmer, Surre, Tullis and Strickland were actively and, withal, joyously occupied, not in catering to, but always anticipating the desires of the jolly occupants of those three cars. A more contented set of travelers we have never seen.

Saturday morning, beneath a sky that promised well for the day, the party was taken from the train, in automobiles, to the Elk's Club, where breakfast was served.

Then followed an inspection of the plant where Continental-Erie tires, tubes, grips and other rubber goods are made. It required two hours to make the tour of the factory, and even within that time only a cursory examination of its well-planned departments was possible. The visitors learned, among other things, that three-quarters of the plant is in operation night and day; that a large new building, to be devoted entirely to the manufacture of motorcycle tires, is under construction, and would be ready in time to help the company meet the 1913 demand.

The plant is a model of the tire-manufacturing art. It is clean, scientifically laid out, and kept in operation by an unusually high class of employees. The company is constantly increasing its efficiency, the acquisition of new labor-saving devices being of almost weekly occurrence. One of the latest pieces of this type of machinery to be installed is an almost human contraption for cutting fabric on a bias, a by no means easy proposition.

In addition to being shown how tire shoes and inner tubes were evolved out of those odd-looking chunks of crude rubber, the visitors

were shown how the Continental Company manufactures such specialties as handle-bar grips, patches of all kinds, gas and lamp tubing and connections, many types of hoses, pedal rubbers, automobile and carriage bumpers, non-slip-lag for belt pulleys, rubber corks, etc.

The kneading of the crude rubber into flat pieces of available size and thickness; the care characterizing the operation to effect the proper composition; the painstaking manner in which the outer and inner tubes are brought to the marketing stage; the personnel and the splendid discipline of the employees of the factory—these and a score of other interesting details made the inspection tour well worth while.

A tasty luncheon was served at the Erie Club. By this time it was raining in torrents, and it poured at intervals during the afternoon.

During the brief dry interval, the party was taken in automobiles to the beautiful Kahkwa Club, splendidly situated on a knoll overlooking the lake. Although the intermittent rain and the saturated soil did not permit of much outdoor recreation, Mr. and Mrs. Palmer and Mr. and Mrs. Surre did not allow weather conditions to spoil their plans. What with dancing to music furnished by a stringed orchestra, card playing and the like, the afternoon passed quickly by.

Then came the dinner, its menu splendid from the mock turtle to the café noir. Three hearty cheers followed brief remarks by Messrs. Willis and Sauer expressing the appreciation of the party of the generous hospitality of which they had been the recipients. President Palmer responded in his charmingly modest way.

The following constituted the Erie party: Fred I. Willis and wife, Fannie C. Slocum, Hearsey-Willis Company, Indianapolis, Ind.; Jacob Roth, Albert H. Jarecki, Chas. S. Coleman, Continental Rubber Co., Erie, Pa.; Walter S. Tullis, Continental Rubber Co., New York, N. Y.; E. A. Neff, W. D. Tracey, Ball Fintze Company, Newark, Ohio; T. C. Larter, Lockwood-Luetkemeyer-Henry Company, Cleveland, Ohio; H. S. Smith, C. J. Smith & Co., St. Paul, Minn.; W. H. Grover, C. J. Smith & Co., Norfolk, Va.; C. J. Smith, C. J. Smith & Co., St. Paul, Minn.; C. C. Strickland, Robert Jarecki, James N. Thayer, Continental Rubber Company, Erie, Pa.; W. P. Swartz, Continental Rubber Company, York, Pa.; W. H. H. Wolfe, W. H. and L. C. Wolfe Company, Altoona, Pa.; Mr. and Mrs. A. J. Musselman, Allied Motors Corp., Chicago, Ill.; Mr. and Mrs. F. W. Grubb, Excelsior General Supplies Company, Chicago, Ill.; R. J. Leacock, Leacock Sporting Goods Company, St. Louis, Mo.; R. D. Webster, Eclipse Machine Company, Elmira, N. Y.; George W. Nock, Eclipse Machine Company, Philadelphia, Pa.; Mr. and Mrs. J. Warren Jones, W.

B. Jarvis & Co., Grand Rapids, Mich.; A. Wollerstein, Hub Cycle Co., Boston, Mass.; L. J. Palmer, Hub Cycle Company, Erie, Pa.; M. A. Henry, Vim Cycle & Hardware Company, Buffalo, N. Y.; Mr. and Mrs. Thomas J. Smith, Penna Rubber & Supply Company, Cleveland, Ohio; T. R. Palmer and wife, Continental Rubber Works, Erie, Pa.; L. D. Harden, Pope Manufacturing Company, Hartford, Conn.; W. F. Carroll, Utica Cycle Company, Utica, N. Y.; William Holland, Henry Keidel & Co., Baltimore, Md.; W. F. Remppis, Reading-Standard Company, Reading, Pa.; F. C. Jarecki, A. W. Brevillier, O. E. Becker, Continental Rubber Works, Erie, Pa.; George P. Miller, *Motorcycling*; Mr. and Mrs. A. S. Deysher, Mr. and Mrs. Keyser Frey, Reading Standard Company, Reading, Pa.; Mr. and Mrs. W. J. Surre, J. A. Vey, Mr. and Mrs. F. W. Fee, Continental Rubber Works, Erie, Pa.; Mr. and Mrs. G. H. Greiss, Continental Rubber Works, Philadelphia, Pa.; F. A. Brevillier, Continental Rubber Works, Erie, Pa.; Mrs. Robert Henry, Continental Rubber Works, Buffalo, N. Y.; C. E. Moorehouse, Standford Company, Torrington, Conn.; Alex. Jarecki, Charles Jarecki, Carl Jarecki, Continental Rubber Works, Erie, Pa.; Howard A. French, wife and son, Continental Rubber Works, Baltimore, Md.; Misses Alice M. and Mary Henry, Continental Rubber Works, Buffalo, N. Y.; Mr. and Mrs. J. Leo Sauer, *MOTORCYCLE ILLUSTRATED*, New York, N. Y.; Eugene A. Bolles, *Bicycling World*, New York, N. Y.

ANOTHER TIRE COMPANY.

AKRON, O.—The Marathon Tire & Rubber Company, of Akron, Ohio, has been incorporated with a capital stock of \$10,000 to manufacture rubber goods of all kinds, including automobile and motorcycle tires. The incorporators are Ellis R. Diehm, C. C. Owens, Sterling Newell, Donald McBride and H. J. Crawford.

NEW GOODRICH OFFICES.

AKRON, O.—Plans have been approved by City Building Inspector Goodwin for the erection of a large addition to the office building of the B. F. Goodrich Company. It is the intention to unite the office forces of the Goodrich and the Diamond Company. The new office building will be 228 feet long and five stories high. The cost of the addition will be about \$100,000.

COLUMBUS RELIABILITY RUN.

COLUMBUS, O.—At a recent meeting of the Columbus M. C. a committee was named to arrange for a reliability trial to be held some time this fall. The club will conduct a run Sunday, August 25.

MANUFACTURERS

GEORGE WAGNER RETIRES

Assets of Wagner Motorcycle Company Taken Over by Motorcycle Accessories Company.

THE announcement this week of the retirement of Mr. George Wagner from the motorcycle field, and the discontinuance of the machine that bears his name, comes as a great surprise to the trade.

Mr. Wagner, who was at the head of the old company, was one of the pioneer bicycle and motorcycle manufacturers, and as well-known throughout the motorcycle fraternity. During the past eleven years, in which his entire efforts have been devoted to the power-driven machine, he has developed an extremely strong, substantial and practical motorcycle of which he is justly proud. His efforts and success in the manufacturing department formed a very strong part of the foundation upon which the company has gradually increased their annual sales, from only 250 machines in 1901 to the present season's output, which ranges into the thousands.

Mr. Wagner's retirement and the sale of his interests in the business was due to a breakdown in his health which required an extended rest after many years of steady mental and physical work. He has been in Europe for the past six months on an indefinite visit to his native home and other points.

The Motorcycle Accessories Company has bought all of the Wagner interests, including patents, special machinery and the extensive stock of motorcycles, accessories and parts. They are increasing their manufacturing equipment, and after the present season's output is completed will discontinue the building of complete machines and devote their entire

factory to the manufacture of high-class accessories for all kinds of motorcycles, motor boats and to the development of improved parts for all models of the Wagner machine.

The new company has been launched under the guidance and control of Mr. Ed. Worthington and Mr. Ira W. Stewart, who are two of the most thoroughly experienced men in the American motorcycle field. Mr. Worthington has been general manager of the Wagner Motorcycle Company since its early years, and was a member of the firm during the greater part of this time. He is recognized as one of the shrewdest buyers in the business, and his extensive experience and former success is a strong indication for the future. Mr. Stewart, who has been sales manager of the former company for the past two and one-half years, had previously gone through every phase of the retail business, ranging from the small agency up to a distributing business, and with his keen observation this experience puts him in a position to see every proposition from the customers' point of view.

The new company will incorporate in the near future, and with their broader foundation will undoubtedly attain far greater proportions than they could have hoped to reach in the past.

GOODYEAR BRANCH IN BALTIMORE.

BALTIMORE, Md.—The Goodyear Rubber and Tire Company will erect a handsome building at Cathedral and Preston streets for the exclusive use of its local branch. The lease of property for a long term has been arranged and work on the structure will begin at once. It will be equipped with everything modern and will be ready for occupancy by the latter part of October. The cost of the building will approximate \$35,000.

TAKES OVER THE EAGLE

American Motor Company Will Market Machine Now Handled by Chicago Company.

CHICAGO, August 19.—W. T. Marsh, treasurer and manager of the American Motor Company, arrived in Chicago this morning on his way to the coast. Mr. Marsh will make stops at St. Paul, Minneapolis, Los Angeles, Portland, Oregon, San Francisco, Salt Lake, Denver and Omaha, returning by the way of Chicago.

When interviewed by a representative of this paper, Mr. Marsh stated that the American Motor Company would shortly take over the business of the Eagle Motorcycle Company, of Chicago, and would then be in position to place Eagle agencies throughout the United States and Canada direct from the factory. All Eagle machines will be equipped with De Luxe motors made by the F. Spacke Machine Company of Indianapolis.

Mr. Marsh is very optimistic about the outlook for 1913 and stated that he had ordered 2,000 motors for Eagle equipment alone.

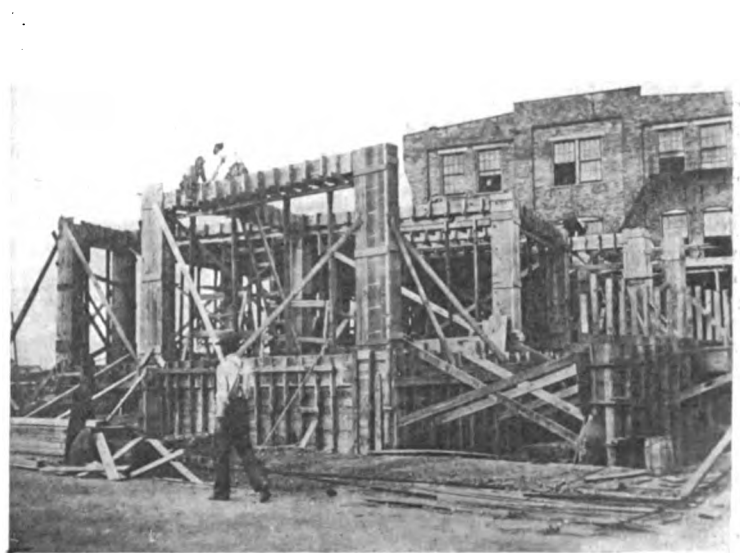
The American Motor Company will make only two models of the M-M motorcycle outside of the Eagle line and will build nothing but 28-inch wheels for 1913.

All machines will be finished in grey, the M-M models being plain, and the Eagle machines finished in black paneling on the tanks and black and gold striping on the frame and guards.

RAY DAY, Pierce county distributor for the Merkel, has opened new and larger quarters at 954 South Tacoma avenue.



Laying First Floor of the New Plant of the Miami Co.

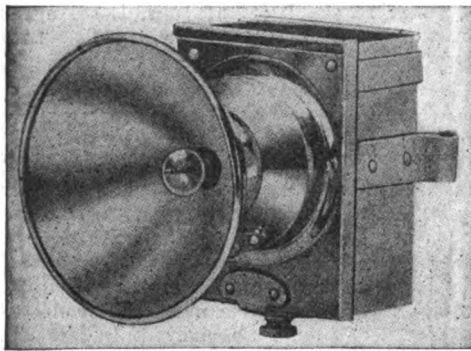


New Office Building of Miami Cycle & Manufacturing Co.

THE ELECTROLAMP.

MOST motorcyclists appreciate the convenience and other advantages of electric light for night riding, and the news that the Electrolamp Company, of 67 Atwater street, East Detroit, Mich., is bringing out an electric motorcycle lamp will undoubtedly be welcomed. The lamp, which is called the "Electrolamp" is of the self-contained type, having a storage battery fitted into the casing on which is mounted the lamp itself.

The battery case is of hard rubber with automatic connections, and the battery can be instantly removed by unlocking the door, no tools being necessary. Side lugs are attached to the casing, which fit any motorcycle bracket. The battery will give a continuous service of from twenty-five to thirty hours and should last two years. The cost of recharging is given as not exceeding twenty-five cents. The lamp proper is made with a heavy brass mount and bell, the reflector being parabolic with silver-plated surface. The finish is in



nickel, and the plating is heavy. The dimensions are 5½ inches over all, 6 inches deep and 4¾ inch front glass. The total weight of the Electrolamp is 4½ pounds. Standard brackets for any make of motorcycle on the market are furnished.

TO ORGANIZE SELLING COMPANY.

WILLIAM F. REMPPIS, has sent in his resignation as sales-manager and director of the Reading-Standard Company, taking effect on August 15. It is his intention to organize the Remppis Selling Company, and do business as a manufacturer's agent from a Philadelphia headquarters in the near future. Mr. Remppis states that he has not disposed of his stock in the Reading-Standard Company.

UNDER HEAVY PRESSURE.

REPORTS from the American Motor Company are to the effect that the Brockton factory is under heavier pressure now than it was in March, and that there are no indications of a falling off in the near future. The company has increased its normal pay-roll by fifty per cent. and the force is working overtime five days a week, but this extension—practically doubling the output—has not allowed the factory to catch up with the orders. Considering the lateness of the season this activity is unprecedented at the home of the M. M., and the company is contemplating a marked increase in its facilities in preparation for the 1913 season.

BACK FROM A TOUR.

GEORGE T. COCHRANE, L. P. Appleman, and Leo Tweedale, members of the Washington Motorcycle Club, have just returned from a week's trip through Western Maryland, Pennsylvania and New Jersey. A short time was spent in Atlantic City, N. J.

AIDS THE CARBURETER

Speedo Is Designed to Automatically Produce a Better Mixture.

THERE is a well-defined limit to the vaporizing and mixing power of the carbureter proper, by reason of its being limited to the initial contact of the fluid gasoline with the air. An uneven mixture, rare and rich in spots, is the result of this limitation, regardless of the fineness of the adjustment. Since the suction is greatest in the mixing chamber at the beginning of the stroke, it is evident that the mixture is the richest at this point, as more gasoline is drawn from the spraying nozzle, the mixture becoming leaner as the stroke progresses. The spray is therefore in an uneven state of subdivision because of the variable suction.

With a view to providing an auxiliary attachment that will increase the power of a motorcycle engine, permit of economy in the use of fuel, and prevent over-heating and carbonization, the Fulton McCutchan Company, of 1149 Michigan avenue, Chicago, distributors for the manufacturers, is marketing an auxiliary air attachment known as Speedo, which can be attached in five minutes to the intake manifold. It breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. It makes more air necessary and automatically injects just the proper additional air all running speeds require.

Speedo is sold under an absolute guarantee, and the purchase price will be refunded to any dissatisfied purchaser within thirty days upon the return of the instrument. The retail price of the motorcycle device is \$2. Concerning the operation of Speedo, its manufacturers say:

"In Speedo are embodied all features proper for an auxiliary of highest efficiency, designed not only to perfectly remix and revaporize the carbureter mixture, but to provide in that mixture the highest combustive quality at all speeds by maintaining constant proper proportions of air.

"It will be noted that with Speedo the auxiliary air injected is in direct proportion to the demands of the engine, and is entirely independent of the carbureter, or of atmospheric conditions. Because of the complete evaporation, more air is required with Speedo, for more fuel is actually burned with a given quantity of carbureter vapor. Thus, having a perfectly vaporized fuel, less is required for a given heating effect. Speedo does its work with a greater sensitiveness, and greater fineness than is possible in any carbureter proper."

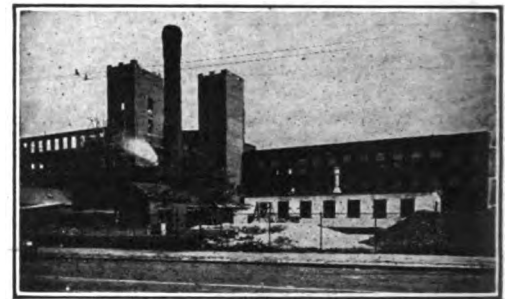
Readers of MOTORCYCLE ILLUSTRATED will be interested in the company's advertisement on page 13 of this issue.

MORE BOSCH CONTRACTS.

THE latest contracts signed up with the Bosch Magneto Company include the Spacke Motor Company, Henderson Motorcycle Company and the Breed Manufacturing Company. These concerns will use the Bosch magneto exclusively on all 1913 models. It will be of interest to our readers to learn that with the addition of the contracts mentioned, the total 1913 specifications for Bosch magnetos will exceed 100,000.

MOVE GENERAL OFFICES.

THE general offices of the United States Tire Company have been moved to the new United States Rubber building, Broadway and 58th street, New York. This structure, the tallest north of 42d street, has recently been completed and will be utilized in future as the home of the United States Rubber Company and its subsidiary companies. The building is twenty stories high. The United States Tire Company will occupy the basement and sub-basement as a stockroom, the ground floor for its New York branch and the fifteenth, sixteenth and seventeenth floors as general offices. The company has over 400 employees in its general offices. The New York branch store will be moved into the new quarters about August 15.



Part of the New Plant of the Hendee Manufacturing Company.

NEW JONES FACTORY.

TO meet the greatly increased demand for its product, and to fill large speedometer equipment contracts with various manufacturers for the 1913 season, the Jones speedometer is trebling its manufacturing facilities, by fully equipping with special improved machinery at Bush Terminal, Brooklyn, an additional factory much larger than its plant at New Rochelle.

The New Rochelle factory will be continued at its full capacity, but the general offices and shipping department will, on October 1, be removed to the Bush Terminal, where, with ideal shipping facilities—loading directly to through freight cars at the factory door—four to eight days' freight will be saved on shipments to all western points.

On the same date, the commercial vehicle instrument shipping department now at the Canal place, New York City, factory—where the recorders, hub odometers and truck speedometers are made—will be moved to and consolidated with the speedometer service station in the Speedometer building, Broadway & 76th street, New York City.

FISK EXTENSIONS.

THE Fisk Rubber Company is making extensive additions to its plant in Chicopee Falls, Mass., in order to take care of the increased demand for tires. Contracts have been let to the Fred T. Ley Company, of Springfield, for two buildings. One building is to be 250 feet long, 90 feet wide, six stories and basement. The other building will be 200 feet long, 60 feet wide, four stories and basement. Special rubber machinery, boilers and engine for the power plant are to be installed which will increase the present capacity about 50 per cent. This extra capacity will necessitate the employment of 600 or 700 more workmen. The buildings are to be completed and machinery installed by November 1, 1912.

BOOKLET ON VANADIUM STEEL.

A BOOKLET has recently come to notice which should prove of interest to all manufacturers who are watching the development of the vanadium steel industry. The contents are unusually interesting, due to the fact that they are not merely a group of assertions, but rather a collection of reports on tests which prove beyond reasonable doubt that chrome vanadium steel contains valuable properties never before developed in any other steel.

Cuts are distributed throughout the book showing clearly the result of the different tests on springs, gears, axles, bars, etc., and the descriptive matter tells under what conditions the different tests were made. The booklet is being distributed by the United Steel Company of Canton, Ohio, pioneers in the manufacture of chrome vanadium steel, and will be mailed upon application.

BIG BUSINESS IN MOTORS.

DURING the Cycle Trades convention at Detroit, F. W. Spacke, of the F. W. Spacke Machine Company, of Indianapolis, sold 3,000 twin motors in three hours. Two thousand were ordered by the American Motor Company, and the balance by C. A. Crawford, of Saginaw, Mich.

OVER THE ROCKIES.

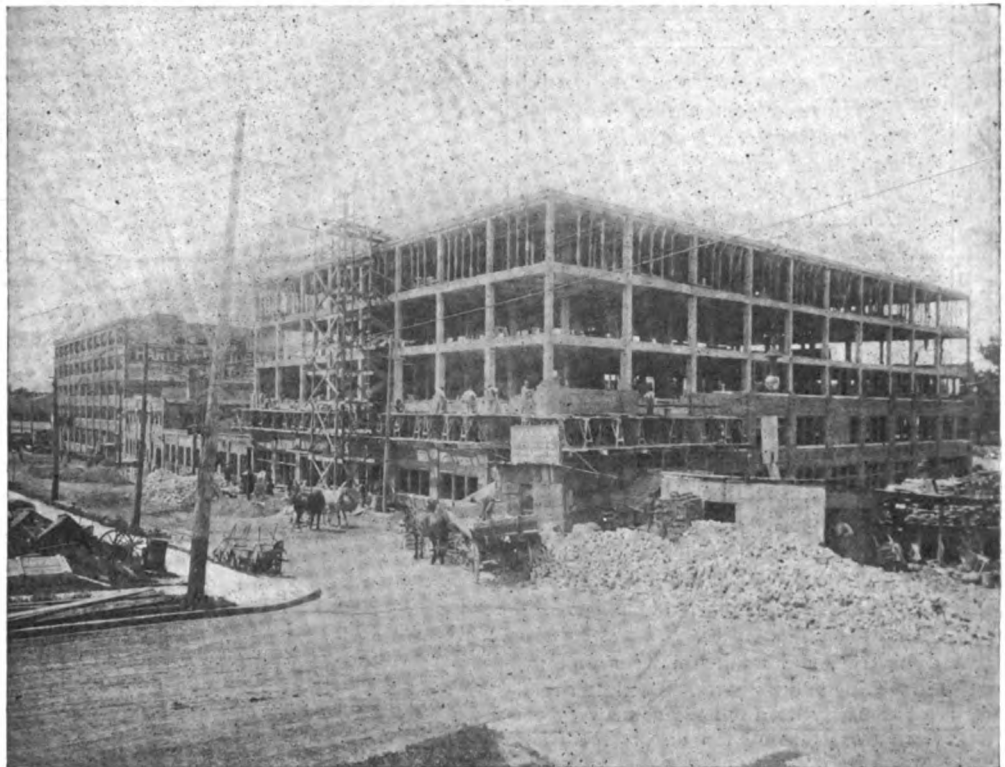
TO tandem over the Rocky Mountains for the first time is the aim of E. F. Winfield, of Grand Junction, Col., with Mrs. Winfield as passenger. The crossing will be made over the Tennessee Pass, at an altitude of 10,400 feet, while the distance to Denver is



437 miles. If successful, Mrs. Winfield will be the first lady rider to cross the Rockies by motorcycle, either on tandem or solo. The machine used is a single-gear Indian 7, with 3-inch rear tire and a reduction of 5.2 to 1. Four to five days is figured on to complete the trip and part of the run will be at an altitude of 9,000 feet.

H. GLENN DAVIDSON has joined the traveling staff of the Troxel Manufacturing Company.

BLAIRS County, Pennsylvania, recently celebrated Flying Merkel day and was invaded by scores of riders of that machine.

**CELEBRATED REACHING THE TOP.**

WHEN the top of the building forming the addition to the Harley-Davidson Motor Company's plant at Milwaukee was reached on July 31, the occurrence was celebrated after the usual Milwaukee custom. A Christmas tree was erected on the top of the hoisting elevator framework, and Walter Davidson responded by providing the contractor's men with two half barrels of Milwaukee's famous product. The two-story building with the square chimney showing above the temporary filing shed in the foreground is to be replaced by a concrete building similar to the one now under construction. There will be an additional twenty-seven thousand square feet with the completion of this last building.

"U-VULK" LIQUID VULCANIZER.

THE Gem City Liquid Vulcanizing Company, of 1021 East Third street, Dayton, Ohio, are bringing out the "U-Vulk" liquid vulcanizer for rapid repair of inner tube troubles. The liquid is used cold and contains no acid; it vulcanizes quickly, and when used with liquid rubber makes a durable and permanent repair unaffected by heat or friction. The "U-Vulk" outfit consists of a bottle of the liquid solution, a roll of Para rubber, a can of liquid rubber, patches and brushes all packed into a neat screw-top can which fits in the tool bag. Each item is packed separately and thus is kept in good condition at all times. The outfit complete is quoted at \$2.50.

TRIUMPH DELIVERY VAN.

THE Triumph Manufacturing Company, of Detroit, Mich., is about to place on the market a delivery van of the motor tricycle type, with two wheels in the rear, two-speed transmission and other features. The machine will be marketed at a very moderate price and will be ready in the course of six weeks or two months.

PLANs for a Labor Day meet have been made by the Davenport (Ia.) M. C. on the Davenport mile track.

QUICK WORK FOR ADDITION.

WHILE the masons and bricklayers were still at work, line shafting was being installed in the addition to the Harley-Davidson factory, thus expediting the work in an economical manner. As fast as the flooring, etc., is completed the work of installing the machinery will be carried on, following the plans for the layout made by the Federal Engineering Company in consultation with Messrs. Harley, William Davidson, John and Northman. The offices and that portion of the machine shop on the first floor will be moved into the new building the latter part of this month.

The shipping facilities are being increased by the installation of a siding, while the brick wall of the structure is growing rapidly. Already several drill-presses and a cold saw are being operated to prepare the holes for the machinery foundation bolts and for the racks for round and flat stock. A second track can be run through the building and will be at the basement level when completed. This depressed track is in accordance with the regulation in Milwaukee that grade crossing are to be avoided, and five feet depression will satisfy this regulation.

SUIT WITHDRAWN.

THE Lovell-McConnell Manufacturing Company, of Newark, N. J., maker of the Klaxon warning signal, which brought motion for an injunction against Chas. E. Miller, of New York, for handling the Newtown horn, has withdrawn the motion.

BAY STATE RACE MEET.

THE Boston M. C. will hold another open race meet at Atwood Park, Saugus, Mass., on Labor Day. The best riders in New England will compete.

The first meet, held July 20, was full of snap and action from start to finish, and was pronounced by old-timers as one of the very best they had ever seen. It is the aim of the club to make this one even better. Entry blanks may be obtained from W. F. Mann, 356 Columbus avenue, Boston.



AN ideal transmission for motorcycle service should have all of the following qualities: Durability, efficiency, flexibility, simplicity, cleanliness, quietness, low first cost and cost of upkeep, and minimum wear and tear on the machine and its parts. The latter quality is particularly desirable, as some very efficient forms of transmission distort the frame and shorten its life very appreciably. Another important quality is the lightness of the transmission as a whole. The writer holds that these characteristics are embodied in the best proportions in the V-belt.

The V-Belt.

In durability, the right kind of a V-belt, when properly fitted as a transmission, is equal to that of a chain. There are numerous cases of leather V-belts lasting well over 5,000 miles running, and that over far from ideal pulleys. A V-belt is flexible laterally as well as radially and longitudinally, but the nature of its contact surfaces will not result in slip, even with great differences in diameter between the driver and driven pulleys. While made up of two or more plies and blocks, it is simple, needing but two pulleys to transmit the drive. Its flexibility and at the same time its tendency to hold on to the pulleys give a minimum of strain on the frame parts of the machine. It is but slightly lighter as a whole transmission than a flat belt transmission of twice the belt face, but power for power, the V-belt is actually lighter than the flat. An inch four-ply V-belt will transmit nearly four times the power of an inch two-ply flat belt.

It is obvious that a one-inch V-belt will permit of a narrower frame than a four-inch flat belt, or even than a two-inch flat belt. The V-belt depends for its power on the side faces in contact with the pulleys, and not on its width, hence a relatively narrow belt with deep side faces will transmit more power than one with shallower side surfaces. Constructional limits permit the use of V-belt transmission on even the highest powered machines, but the flat belt within these limits will barely transmit six horsepower. The V-belt can be used wherever the chain is used and the gear ratio may be changed by the use of different sized pulleys as readily as a chain drive ratio by substituting different sprockets. Variable pulleys may be used, operated by the rider in the saddle, and this is the only form of transmission where this is possible.

There is comparatively no slip to a V-belt, but there is about 3 to 4 per cent. creep, depending on the tension. But it is not at all

necessary to apply the maximum tension, as a one-inch 4-ply V-belt running at moderate speed under a tension of 70 pounds per inch of width per ply will transmit as high as twelve horsepower. After considerable research and experimenting, the following have been found to be minimum diameters for various V-belts: Four-ply, $3\frac{1}{2}$ to 4 inches; five-ply, $4\frac{1}{2}$ to 5 inches. The writer feels that these are still too small and advocates not less than $6\frac{1}{2}$ inches for a four-ply and 7 inches for a five-ply. The most efficient pulley diameter, as far as road and racing service has shown, is 8 inches.

For racing, the chain is probably the better than the V-belt, but very few riders race. The V-belt has its records on the road and track, as well as for hill-climbing and touring. Take the Tourist Trophy races this year. The Junior race for machines up to $2\frac{3}{8}$ horsepower had the first eleven riders all on belt-driven machines. In the Senior race, second, third, fourth, fifth, sixth, seventh, ninth, twelfth and fourteenth places went to V-belt machines. The winner of the 1910 Tourist Trophy event (Collier) rode a V-belt machine. The holder of the English speed records for four horsepower machines used a V-belt. A rider of a single $3\frac{1}{2}$ horsepower machine rode 40,000 miles in forty weeks, using less than six belts for the entire distance. The V-belt is superseded by the chain for occasional heavy side-car and speed work only in Europe.

Where the V-Belt Is Handicapped.

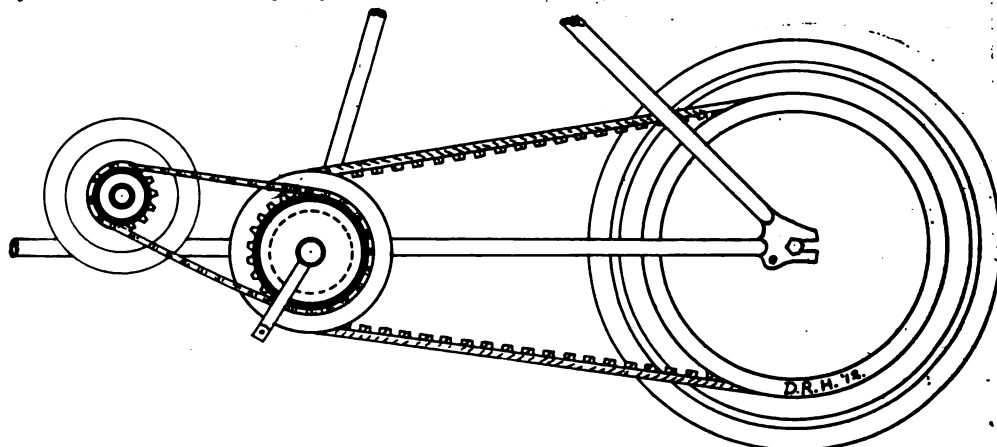
It is probable that the V-belt would not have lost any of its popularity if it had not been handicapped by a number of conditions, namely: Too small motor pulleys; too shallow

belt grooves; improperly made pulleys; weak belts; insufficient guarding from mud, etc., and lastly, overloading of the whole transmission. All but the last two are constructional neglects; there has never been anything done this side of the Atlantic to protect any belt transmission, and the last came from ignorance or the desire to cut down production costs. These faults are generally true of manufacturers of V-belt machines the world over. The remedies are simple.

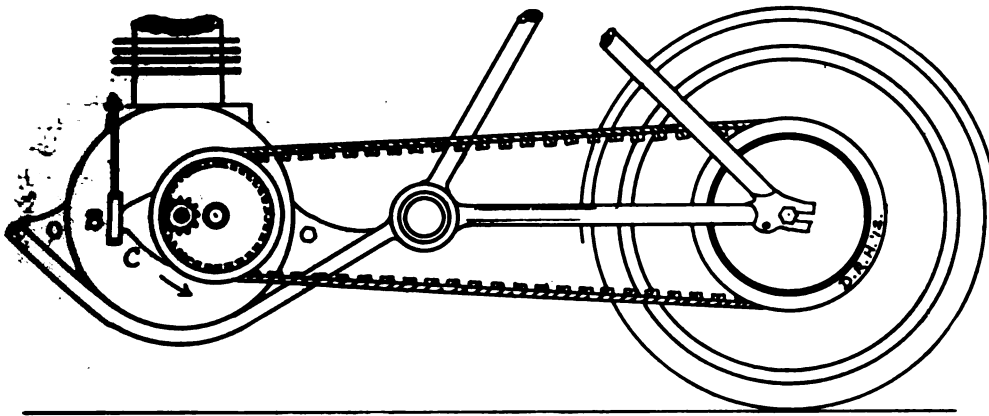
Pulleys Too Small.

It is a belt axiom among technical and belt men, that where possible the diameters of the driver and driven pulleys should be equal or as nearly equal as possible under the conditions of operation. On a single belt transmission, to get a 4 or 5:1 ratio, the front pulley is usually 4 inches and the rear pulley 16 to 20 inches. The latter is so large that it will take up mud or dirt and hit the ground when taking corners. Dirt and even stones thus get wedged in between the belt sides and the pulleys and grind down both, or the rim is bent on striking a rock or the like. Over the little front pulley the belt is bent too much, and soon wears out or loses its life. The blocks on one particular make of machine have shown signs of wear by rubbing together as they pass over the front pulley. The remedy is obvious, viz., use larger front and smaller rear pulleys.

The ratio has to be maintained, however, and there are two tried ways of doing away with the trouble. The first of these is the double drive, the first drive to a countershaft and the final to the rear pulley. The arrangement necessitates the addition of another form of transmission, and the one in the illustration em-



Compound Chain and Belt Transmission.



V-Belt Transmission with Undergearing.

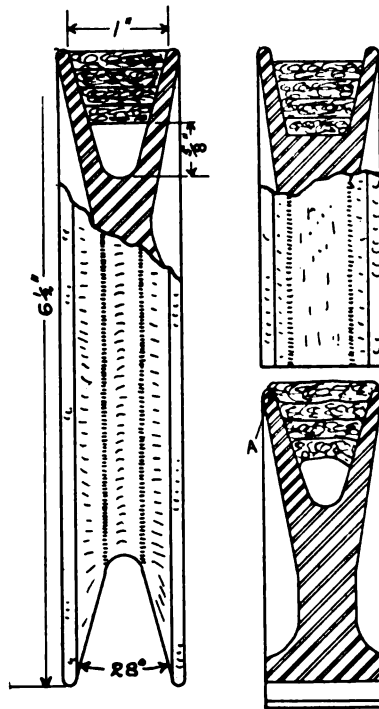
plays a chain for initial drive and a V-belt for final drive. This is used on the (English) 2½ h. Douglas and 8 h. Williamson machines. The motor shaft has a small sprocket and the countershaft a larger one. The clutch is fitted to carry the countershaft sprocket. The countershaft has an 8-inch V-pulley and the rear wheel a 15½-inch belt rim. The total ratio is 4.1 from the motor to the rear wheel. The rear pulley looks large, but is calculated for a 24-inch wheel; on a 28-inch wheel, there would be two inches more clearance. Where a two-speed gear is fitted for use on our roads, the countershaft position is the only practicable one. This drive arrangement has the positivity of the chain drive for the highest speed in the transmission (motor to countershaft) and the flexibility of the V-belt drive to the rear wheel. The slip comes at the rear wheel, hence the belt takes better care of it than would a chain or any other final drive. There is no reason for close adherence to the exact ratio of sprockets and pulleys shown; the pulleys could be made nearer to the same diameter and the reduction be had in the sprockets. Change of gear ratio is effected by changing the front sprocket, the same as on a chain-driven machine.

Undergearing.

Where a clutch alone is to be used, and a single belt transmits the power, the arrangement shown in the next figure has been found efficient. It was first used by the N. S. U. makers, and is used successfully on the chain-drive R-S. machines today. On the motor shaft is a spur pinion, and this meshes with an internal gear carrying the front pulley. This gives a small rear pulley, and puts the power where it is best applied; that is, to the driver pulley. By the undergearing arrangement, the motor is permitted to run at a high speed and give off its maximum power, while the belt runs comparatively slowly, but at close to an equal velocity over both pulleys, and minimum wear results. The advantage is based on simple mechanical principles.

The drum carrying the internal gear is mounted on a sleeve which pivots around the extension of the motor shaft and has an arm C ending in a nut. This nut fits on a screw on the end of rod A, and a casing, B, encloses both. To take up belt slack, the rod A is turned to move C in the direction of the arrow; this swings the drum upwards and tightens the belt by increasing the distance between the pulleys. It is used as a free engine device on the N. S. U. machine by slackening the belt (approaching the pulley toward the rear one) by raising the arm C and lowering the drum. The clutch on a transmission of this form

should be located in the front drum, and the eccentric mounting need not be used. Mr. Frank Dolt, chief engineer of the R.-S. company, suggests the location of the clutch in the front pulley.



Right and Wrong Fits of V-Belt.

Grooves Too Shallow.

This is a frequent fault with pulley makers in general. By reason of the little pulleys now

used the space between the bottom of the groove and the wall surrounding the motor shaft was very limited. The result is that the belt, as it wears, "bottoms" in the (usually) flat bottom of the groove, and tears apart or grinds itself off at the bottom. The transmission of the power is then by a series of jerks rather than by a continuous pull. A typical example is shown in the accompanying figure, where the belt, normally of good shape, has bottomed in the groove. The same action, though to a lesser extent, occurs when the belt is too small for the pulley or the pulley too large for the belt.

The proper fit is shown in the half-section of a 6½-inch pulley. For an inch belt there is allowed ⅝-inch clearance, and the bottom of the groove is the arc of a circle. No matter how much wear there is in a belt, it cannot bottom; it will wear out first. The correct angle, 28 degs., is also indicated.

Improper Pulleys.

If the belt is too big for the pulley or the pulley not 28 degs. angle, the effect will be as shown in the next figure. Here the belt lops over on both flanges and is distorted through all the plies. If the pulley is made of ordinary cast iron or steel, the belt will grind it away to a sharp corner as at A, and the upper ply will be cut away or tear off. A belt running under these conditions goes to the scrap heap in short order. A good design for the flange ends is shown in the figure for a 6½-inch pulley.

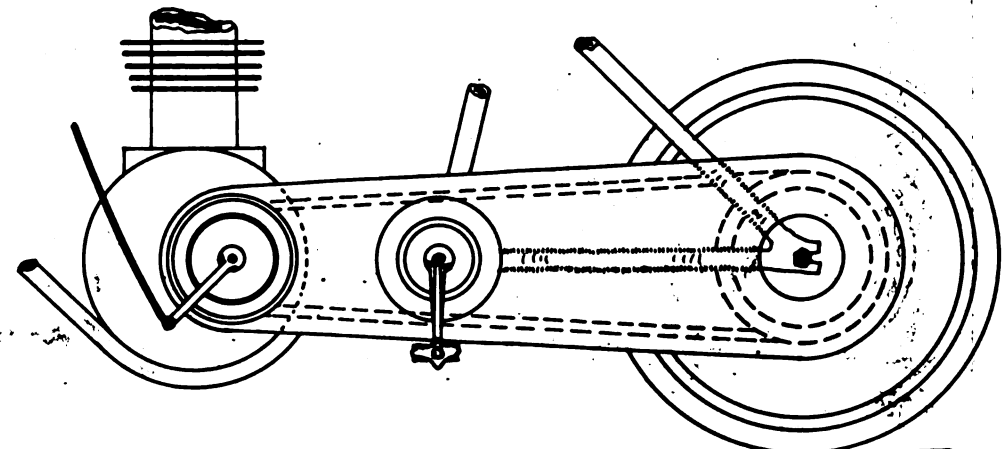
Weak Belts.

These are generally belts which are too small for the power to be transmitted or are improperly designed. The advice of a belt man as to power is distinct economy as compared with the so-called "practical experience" of the average designer. Very little is known about V-belts outside of the belt makers themselves, and they are constantly experimenting in their own plants or under their direction in laboratories. Most people when sick consult a doctor rather than a glass-blower.

There is no excuse for an improperly designed belt.

Overloading Belts.

There was a time when a single size of belt was made to do for all models turned out by the manufacturer. This was all right as long as the belt was strong enough for the most powerful model made, when it was distinctly economical for the smallest motor. This was (and unfortunately in some cases is) usually not the case; the small belt "does" for the big motor. The result was short belt-life and



Efficient Guarding for Direct Belt Drive.

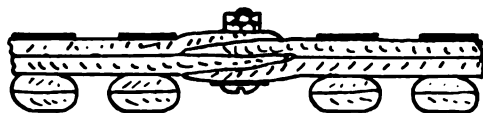
general dissatisfaction, and this was one of the causes that made the V-belt unpopular. Cooperation with the belt maker is the obvious remedy.

Mudguarding.

All forms of transmission operate best when clean; that is, free from mud, dirt and water. On a machine with footboards the belt can be kept quite clean by fitting wings at the front of the boards and shallow flanges below the belt to the rear stays. But this is a pedal-country, and the best remedy is to house the transmission in completely, a thing perfectly possible and convenient with either of the forms suggested above. A housing of sheet metal is shown in the last figure. It is fastened to the crankcase forward and to the rear stay and fork at the rear. The proper aperture for the pedal crank is easily made, or the portion adjoining the bracket can be recessed. The Clyno motorcycle uses this on both the belt and chain models. The rider can be kept clean by using such a housing, as the belt or chain throws dirt over him, and occasionally water over the motor.

A Simple Fastener.

The V-belt is one of the easiest to fasten, and a simple method of coupling the ends is here shown, a four-ply belt being used. The end blocks are cut away and the rivets ex-



tracted. The plies are pointed and laced together as indicated and a flister-headed bolt effects the coupling. Under the head is a thin washer, and there is another under the nut. There is a lock-nut fitted under the regular nut in this design. For a simple fastener there is no device that can better it, and the resistance to tearing apart is the strength of the four plies taken together. The coupling takes up no more space than a belt block.

TOWANDA RACES, SEPTEMBER 10.

BRADFORD, Co., Pa., is to have its first big motorcycle meet on September 10, when the Towanda M. C. will hold a series of events.

HELD TANDEM PICNIC.

COHASSETT BEACH was the scene of a novel tandem picnic held on August 4 by the Hozinam (Wash.) M. C. The members took the boat to Westport and rode the beach to Cohasset, where lunch was served. Races were held on the sands during the afternoon, the tide allowing of only three events being run off. The summaries:

30.50 stock, four miles. Won by Kimberk; second, Hall. Time, 6:53.

61, stock, eight miles. Won by French; second, Kimberk. Time, 10:55.

53, stock, four miles. Won by Kimberk; second, Smith. Time, 6:13.

SATURDAY'S PHILADELPHIA RACES.

THE attendance at the Point Breeze Motor-drome, Philadelphia, Saturday, the 17th, was comparatively light, on account of the inclement weather. Only three events were run off. The fourth, the unknown distance race, had to be called on account of rain. In the Class B event there were five entrants, and at no time during the races were the contestants more than fifty feet apart. Hartley Thomas, the Western rider, was again in form, coming in first in the Class B and also winning the match race, with Harry Klebes, the local butcher boy. Vanderbery was leading the field in the last lap of Class B when he broke his gasoline pipe. In the open event he broke his handle bars.

Summaries: First heat of Class B, 4 miles—Won by Klebes; second, Thomas; third, Veditz. Time, 2:55. Final heat won by Thomas; second, Vanderbery; third, Klebes; fourth, Veditz. Time, 2:10, for 3 miles.

First heat of open event, 4 miles—Won by Vanderbery; second, Klebes; third, Veditz. Time, 2:53½. Final heat, 4 miles—Won by Thomas; second, Klebes; third, Veditz.

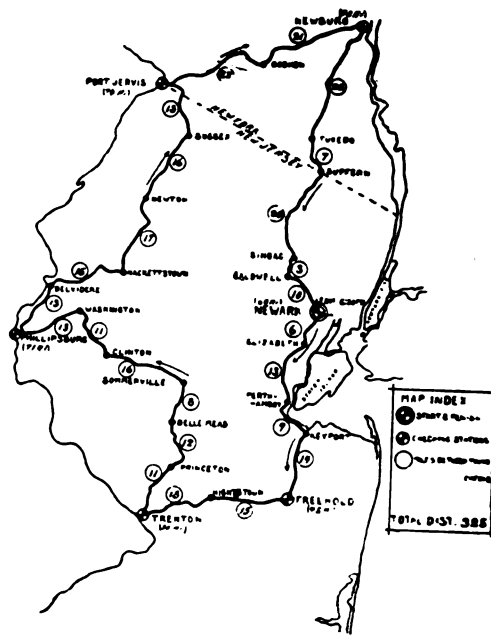
First heat of special match between Thomas and Klebes—Won by Thomas. Time, 2:13½ for 3 miles. Final heat, 3 miles—Won by Thomas. Klebes did not finish. Time, 2:12½.

LANTERN PARADE IN NEWARK.

THE N. J. M. C. will hold its first lantern parade about September 15. A committee of ten members have been working on it for the last three weeks.

ANOTHER 24-HOUR RUN.

THE New Jersey Motorcycle Club, Inc., will hold its Fall 24-Hour run on August 31 and September 1, the event being open only to amateurs. A unique feature will be in the classification, which consists of private owners, trade riders, passenger, and ladies invitation classes. In the passenger



class, side-cars, tri-cars or tandems are eligible, and passengers must weigh over 110 pounds to qualify. In the ladies' invitation class, there is no entry fee, and any lady finishing the entire course as passenger or rider will receive a special medal. The route is from Newark to Freehold, Trenton, Somerville, Phillipsburg, Hackettstown, Port Jervis, Newburgh, N. Y., Suffern and Newark, a total distance of 325 miles.

COMBINED MEET.

SEPTEMBER 1 and 2 are the dates for the combined motorcycle and horse-race meets at Bates Park, Saginaw, Mich. The two-wheeler cards will have amateur and pro events, and special exhibition features by the Merkel riders from Detroit.



Detroit Cycle Trade Convention Folks Who Visited the Plant of the Ford Motor Company.

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J. LEO SAUER,
President

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THURSDAY

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H. N. CONDUCT,
Secretary

A BIG OPPORTUNITY.

"**W**HAT a wealth of literature," says an English writer, "there is in a journey!"

How many millions of miles do British and American tourists cover in a year? They see the canals of Bruges, knowing neither whence the canal boats come nor whither they go. They drive in a drosky through a Russian city, gazing at statues and spires and never hearing what the driver says to his pair.

They call this "doing things"—doing Belgium, doing Russia. And it is because British people have fallen so into the habit of "doing things"—of sightless sightseeing by clock-work—that some hundreds, or perhaps thousands, of motorcyclists are now sitting at their desks with knitted brows and wet cloths around their temples, bemoaning that it is so hard to make an essay on a motorcycle journey.

The essay they want to write will be worth the writing.

The motorcyclist should merely put in words the hints, the gains, the wrinkles he learns in a motorcycle journey. And some think it is difficult.

Read what Tom Brown learned when he went to Rugby on board the tally-ho—how straw will keep the feet warm better than the finest lady's muff; just what to drink when the coach pulls up; how to begin and how to end a peashooter fight. Read "A Sentimental Journey," and, leaving the sentimental part aside, see how much there is in the journey alone.

Read—oh! read any of the thousand and one journey books published in a year, and then see if you cannot do as well with a motorcycle trip.

There is such an enormous area for the essayist to disport in. Is he a schoolboy? Then he will ride to school next half armed with a dozen hints on saving gasoline, on keeping his tires fit, on cleaning up that he did not know when he made his first schoolward journey last term.

Is he a territorial, whose motorcycle must bivouac with him, must always be reliable under whatever strain mimic war demands? Then he knows how to reduce his accessories to a compact minimum, in which lightness and efficiency combine in a wonderful co-partnership.

Is he—and this is what he most probably is—just an ordinary man, who keeps his motorcycle for pleasure and likes to get the best he can out of it with the minimum of cost?

Does he not adopt some plan, all his own, for preventing damage by damp or oil while his steel steed is housed in its little stable?

He must. Else why do some men seem to run their motorcycles on nothing a year, while others contrive to make them cost as much as a six-seater car?

We all know the motorcycling Jonah. His accessories come loose because he does not know how to fix them. His tires rot because he does not know how to care for them. His journeys cost double as much as the train fare.

If we are not of his company, it is because we have learned ways to avoid these things.

Our little contrivances may seem obvious. But it will not do to take it for granted that they are so. Any one of them—so simple, so perfectly straightforward once you have been told about it—may settle a problem.

A fisherman on the Thames bank, beginning his career, will offer a roach a morsel about as dainty, from the fish point of views, as a flyblown cod's head would be to an habitu  of a West End supper room. But it only takes a chapter of Izaak Walton or half an hour's demonstration by one of his modern disciples to put that novice of the lure into the way of serving up, for roach and dace and gudgeon, a *bonne bouche* that no well-bred coarse fish can resist.

The motorcycle has not yet found its Izaak Walton. But any man who feels conscious that he runs his motorcycle cheaply and well, and gets out of it the pleasure he desires, may be the Izaak Walton of motorcycling.

CLUBS IN LARGE CITIES.

VISITING motorcyclists and others coming to the larger cities frequently express wonder that the motorcycle clubs are so indifferently provided as to quarters, and think but meanly of riders who will meet in a repair shop, holding their "business" sessions while seated on boxes, work-benches or greasy stools. The comparisons of tourists from even small towns between their own comfortable quarters and conditions such as the above would be amusing were they not a reproach to the two most interested parties, the agent and the rider.

There are reasons for this state of affairs, but the criticisms can hardly be termed unjust, nevertheless. Property is very high, and agents to keep their rentals within bounds, especially in a dull season, must sacrifice club

space and the like. Many motorcycle agents came from the ranks of bicycle agents (and builders) and cannot afford to lay out money for additional floor space; hence the club meets in the shop or in even less favored quarters. Again, the business methods of the average agent are crude; many keep their accounts in a single book, putting down the sales as they come in, and knowing little how they stand from month to month. With such methods of accounting, it is no wonder that they lack the proper "go," and that the club proposition is far away.

But the riders themselves are also to blame. A large city has numerous attractions, and these generally develop the dilettante or "boulevard rider," whose delight is a high-powered mount which he rides up and down the smooth asphalt streets or brags of how many similar riders he has "cleaned up" during an exciting quarter-mile run. To form a club of such material means lack of unity and seriousness of purpose, too often the most noticeable characteristic of metropolitan clubs, so-called. They, the members, are content to put up with anything they can get and rejoice in arm-bands or insignia rather than in awards for road performances.

Obviously, riders of that kidney do not help the agent to benefit by the existence of a club. The machines sold for highway incendiarism are in the minority, and the speed talk drives away the serious rider, and spoils possible sales. General conversation is also rarely what it should be.

The remedy is for the riders and agents to get together and provide proper club facilities, spending a little money and taking pride in the appearance of the quarters, and in the fact that the club is an organization of touring riders, not boys who use the two-wheeler only when there is nothing better to do. A leaf may be taken from the books of numerous social organizations. When the necessary money for their rooms was not at hand they appealed to their friends or issued bonds to cover the needed amount. That this can be done and is done all the time is proof that, with rare exceptions, it can also be accomplished in the cases of most clubs today. It should not be necessary to have to point out to an agent the value of having a club in connection with his garage.

There are well organized clubs in our great cities, but they are few, and the others stand out by contrast. To the good ones, the above is an old story; to the others it should be of benefit.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



THAT motorcyclists are taking deep interest in the Improvement Contest now being conducted in these columns, is evinced by the numerous suggestions received daily. Most of them are essentially practical, and all are worthy of close attention by those who are devotees of the two-wheeler. The second series of suggestions is published herewith. The conditions of the Contest are reprinted below for the benefit of those who have not read the original announcement in *MOTORCYCLE ILLUSTRATED*.

CONDITIONS OF THE CONTEST.

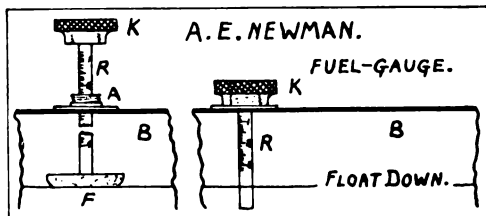
1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the best twelve suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

IMPROVEMENT IDEAS DESCRIBED AND ILLUSTRATED

FUEL TANK FLOAT.

IN order to ascertain the level of the fuel in the gasoline tank a float and level indicator is suggested as an improvement. In the drawing, A is a fixture fitted to the top of the tank and having the upper part threaded. This fixture is bored to take a brass rod R on whose upper end is a knurled nut K threaded internally to mesh with the upper

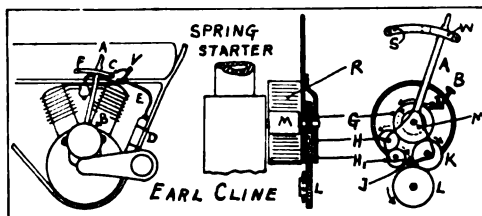


portion of A. The rod is graduated and has a cork float F on its lower end. Normally, the nut K is screwed down on A, submerging the float F as in the right-hand view, but when the level of the gasoline is to be ascertained, the nut is unscrewed, whereupon the float forces up the rod and nut and the markings at the mouth of the fixture A show the level. Contributed by A. E. Newman, Chicago, Ill.

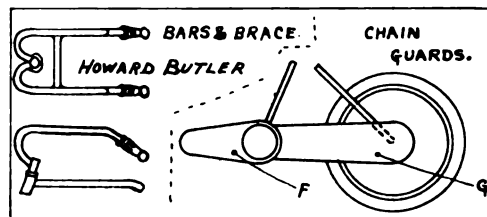
SPRING SELF-STARTER.

THE difficulty many riders have in starting is to be remedied by the use of the spring-operated starter shown herewith. The starter mechanism is contained in a cylindrical casing

fastened to the left side of the motor. It consists of a lever A carrying a spider on which are pivoted a train of gears. The main gear G meshes with a large gear K and also with the upper of two equal sized gears H and H₁. To G is fastened a barrel M, one end of a coil spring R being fastened to M and the other to the casing. There is a ratchet device for gear G operated by the button B. The upper part of lever A moves over a blank quadrant FC, on which the positions S and W indicate the positions for the lever to start and wind the spring respectively. The spring normally remains unwound, and the lever is in a notch in the center of the quadrant. With the motor running, to wind the spring, move the lever to W. This meshes gear K with a gear L on the crankshaft of the motor and the spring is wound by the rotation of the barrel M and gear G, in the direction of the solid darts. It is held from unwinding by the ratchet. To start the motor, with the spring R wound, move the lever to S. Press button B, releasing the ratchet. The spring will unwind, rotating H to the left, H₁ to the right and L



which is now meshed with H₁ to the right. The unwinding of the spring will turn the motor over, but the lever must be quickly moved to the neutral notch to prevent overwinding. For further ease in starting a small Prest-O-Lite tank D is fitted, communicating with a tube E to the inlet pipe. A valve V is fitted to the pipe to give a charge of acetylene gas. The valve is normally held closed by a spring. Contributed by Earl Cline, Marietta, Ohio.



HANDLE-BARS AND GUARDS.

AS an improvement, it is suggested that handle-bars be bent as in the drawing and that a brace bar be fitted. Chain-driven machines should be guarded by casings F and G for the front and rear drives respectively. The use of wider chains is also suggested. The brace on the bars is needed in ordinary riding as well as over poor roads, while the drop renders riding more comfortable. Chains of the silent type should be satisfactory. Contributed by Howard Butler, Lynn, Mass.

TANK FRAME CONSTRUCTION.

A TANK-FRAME construction, top member being 4 to 5 inches diameter and downcomers 3 inches, with loop to hold motor and muffler in lower end of front downcomer. (b) A two-stroke "4 by 4" motor fitted with plain bearings and fitted to loop and by lug to frame at top. Oiling by injection with the fuel. (c) Double ignition, battery and magneto. Cells and coil to be carried in rear downcomer tube. (d) Wide V-belt transmission and free-engine device. (e) Bowden wire control. (f) Extra cross-bar for handlebars. (g) Double truss forks with connections direct to bars. (h) Sufficient clearance for 2 3/4-inch tires, both front and rear. Contributed by Axel Everson, Penn Yan, N. Y.

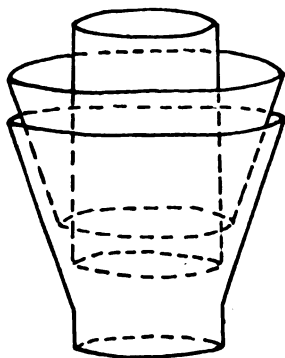
FOLDING REAR MUDGUARD.

THE mudguard is hinged to permit the withdrawal of the rear wheel for tire and like repairs. Pivoted to the rigid or forward section is a locking plate whose forked ends fit under thumb-nuts on the rigid and hinged portions of the guard. On releasing the thumb nuts on their screws, the bar can be swung to one side, when the hinged portion can be raised and the wheel removed. Contributed by B. T. Ellis, Baltimore, Md.

This mudguard is fitted so that the lower portion can be slid in grooves forward into the rigid portion, thumb-nuts or bolts holding the guards in their proper relation to each other when riding. The release and withdrawal of these nuts and bolts allows the rear guard to slide below the rigid part and expose the wheel to direct removal to the rear; also contributed by Mr. Ellis.

INJECTOR CUT-OUT FOR EXHAUST.

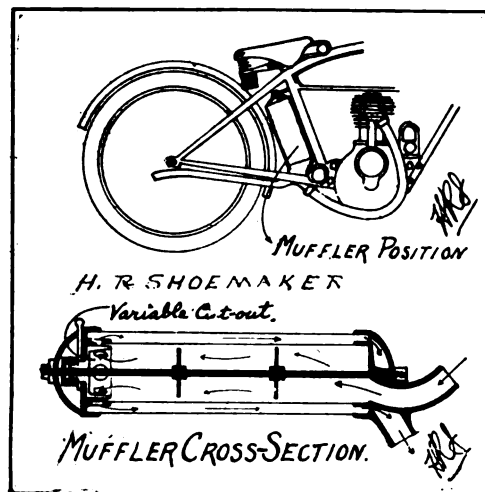
AN injector device for attachment to the exhaust pipe of a motorcycle. Used to prevent back-pressure during the exhaust stroke. Exhaust pipe connected to smaller



tube and bells admit air into the continuation of the pipe. During the other strokes, the device will act to relieve the exhaust gases through the bells. The main portion of the exhaust passes into the muffler, while the remaining gases back out through the injector. Contributed by S. Cleaves, Cambridge, Mass.

LARGER MUFFLERS.

PROBABLY the noise which is most objectionable about a motorcycle is that of the high pressure exhaust gases. Among the several things that tend to give character to this noise are: the amount and quality of the explosive charge, the ignition timing, valve



timing, and peculiarities in the form of the exhaust pipe and muffler.

As far as size goes, present-day mufflers are efficient, but considerable back-pressure is created and noise is by no means absent. Mufflers of over four to five times the cubic capacity of the motor have been found to be necessary if complete silence is desired, but smaller mufflers, if made noiseless, would have a stifling action on the motor, and it is this back-pressure which is desirable to overcome. That is, the maximum of silence and the minimum of back-pressure go to make the ideal muffler.

A lack of space handicaps the installation of large mufflers to a great extent. Practically the only space now available on the majority of machines is that generally occupied by the tool-box; i. e., the space between the rear wheel and the seat post. This space is desirable for a large vertically-hung muffler. This large muffler would have the present baffling arrangements, only on a larger scale, and so arranged that they would not rattle or work loose. It should, of course, be either self-cleaning or readily cleanable. A rear ejector pipe would probably tend to direct any noise left, away from the rider.

On such an apparatus an ordinary cut-out would not be necessary. Instead, it could have an arrangement whereby the baffling action could be altered progressively, if desired, opened so that the regularity of firing of the engine could be tested, or closed enough to produce complete silence. Contributed by Harold R. Shoemaker, Rochester, N. Y.

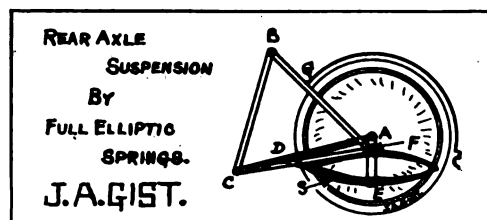
FRICTION TRANSMISSION.

FOR general riding, a variable gear of the friction disc type is suggested. A is a friction disc, 6 inches in diameter, and B a friction wheel 3 inches in diameter. This lat-

ter wheel slides on the feather D fitted to the shaft C E, and F is the bevel gearing on the rear wheel. View G shows the side of the wheel B, and H is the slider fork for shifting B along A, to get the various ratios. The fork is controlled by lever I, while at K is shown a cross-section of the stem of H. The ratios are determined by the position of B with regard to A; when B is at the left as far as it will go, the highest speed is attained. B being slid nearest to the center gives the lowest speed, and on being placed at the center of disc A, gives practically a neutral or free engine position.—Contributed by Elmer F. Hathaway, Cambridge, Mass.

SPRUNG REAR WHEEL.

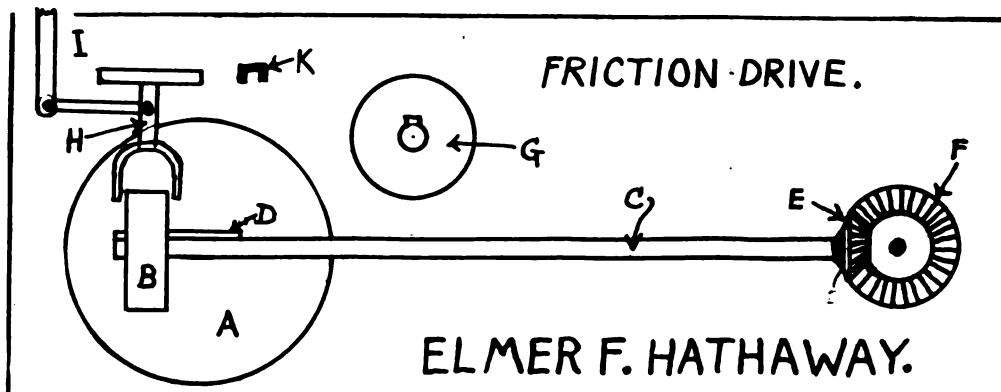
AN arrangement in which the rear wheel is suspended by full-elliptic springs on each side is suggested. There are two additional stays, CF, one to each side, and the springs are attached by hangers AE, having L-shaped pieces at the bottoms to carry springs. Short stay DE is used to brace hanger in place. Stay BF, usually attached at A, is brazed on at F. Mudguard is fastened at G and hinged there to allow of the



motion of the rear construction. The wheel and device play up and down around the centers B and C.—Contributed by J. A. Gist, Wellsburg, W. Va.

CHAIN ON RIGHT SIDE.

WITHOUT doubt the free engine clutch as applied to a motorcycle is the greatest improvement that has been brought out. The machine without a clutch is a has-been. Therefore, as the clutch is here to stay, why do the manufacturers, without an exception, make the use of the clutch hard by placing it on the left side of the machine? Simply because the machine is driven from the left. What is to prevent reversing this order? Let the 1913 machines be right-hand drive, with the clutch of easy access, on account of its necessity (1) to quicker handling, (2) safety, convenience and comfort is obvious, (3) adaptability, not a single extra part, (4) mechanical perfection, and the rest of the nine points are covered in that the arrangement speaks for itself.—Contributed by Paul L. Rathbone, Bloomfield, N. J.

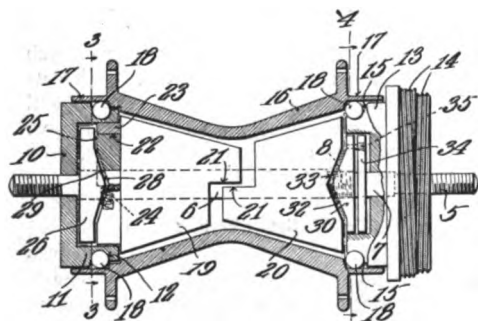


PATENTS

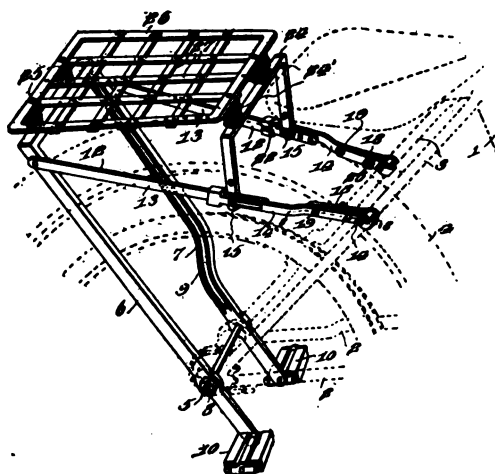
New Coaster Brake, Spring Frame, Luggage Carriers, Grip Handle, Spark Plugs, Etc.

1,025,598. Coaster-Brake. Patented May 7, 1912, by Patrick W. Toohey, Colorado Springs, Col., and assigned to the Toohey-Doolittle Co. In this brake the hub-shell is double coned and the breaking mechanism consists of cones slidably mounted on a spindle and operated by the movement of the pedals. The ends of the cones are cut with a groove and in this groove fits a corresponding projection. The small ends of the cones are shouldered to prevent rotation individually or together. When the rider back-pedals the cones move inward, gripping the interior of the hub-shell, and being rendered stationary, effect the braking. On pedalling forward the cones move outwardly and release the hub-shell and float on the spindle.

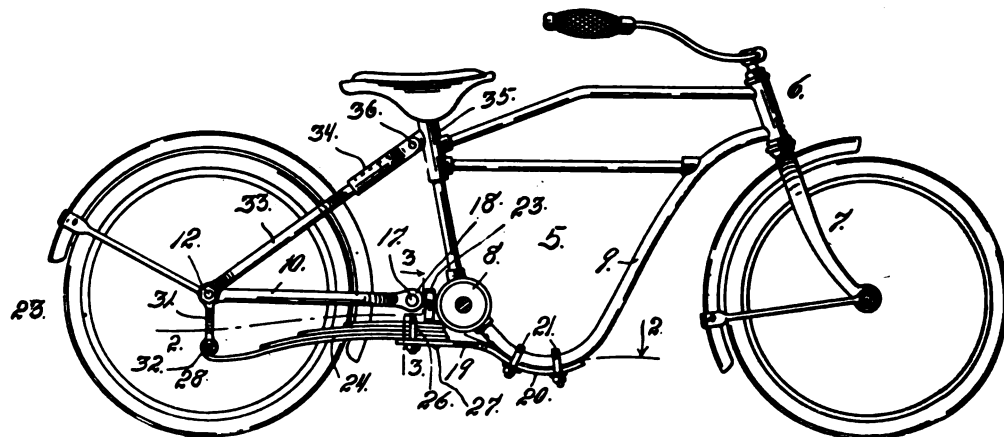
1,030,844. Convertible luggage carrier and tandem. Patented June 25, 1912, by Bert L. Howell, Danville, Ill. This attachment is designed to be fitted to any machine, readily adjusted to different heights of persons and readily convertible from carrier to tandem seat or vice versa. The frame consists of fore-and-aft members attached forward to the rear fork of the machine and to legs forming a yoke at the rear. These legs have stirrups at the ends for the passenger's feet and carry springs on the top



No. 1,025,598—Toohey Coaster Brake.



No. 1,030,844—Howell's Luggage Carrier.

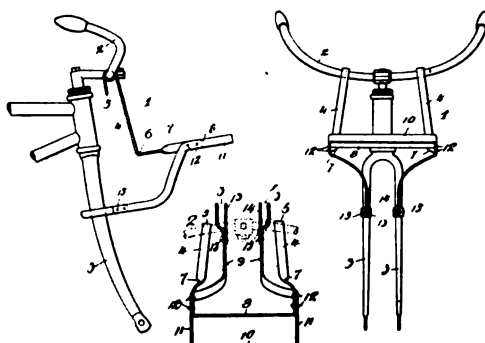


No. 1,029,771—Stephenson's Spring Frame.

bar for the springing of the carrier frame. This latter is sprung forward on a U-brace attached to the adjustable fore-and-aft members. A seat is put over the carrier when used as a tandem attachment; but left off when luggage is to be carried.

1,029,771. Spring-frame for motorcycles. Patented June 18, 1912, by Chas. G. Stephenson, Denver, Col. In this device, the rear stays are pivoted in rear of the pedal-bracket and form the lower members of the double triangular frame, the rear forks forming the two upper members. The ends of these forks slide in fixtures to compensate for the spring motion. Arms at the rear of the double triangle project downward and serve as hangers for the ends of quarter-elliptical springs, whose bases are attached to a Y-plate fastened to the frame-loop. The object is to decrease vibration transmitted to the rider and the power-plant. The motion is rocking about the pivot before mentioned.

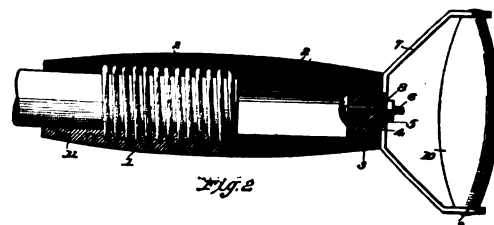
1,031,165. Luggage Carrier. Patented July 2, 1912, by Julius Biderman, New York, N. Y. This is a front luggage carrier whose attachment is to the fork sides and to the handlebars by metal straps with hook ends. The ends fastening to the forks from Ys which clamp over the sides, the load on the carrier holding



No. 1,031,165—Biderman Luggage Carrier.

it more firmly in place. The construction uses no screws, etc., and is removed and replaced by lifting off or on.

1,030,866. Motorcycle Grip Handle. Patented July 2, 1912, by Wm. F. Boast and Wm. B. Conrad, Sterling, Col. This is a handle or grip with sufficient resiliency to relieve the arms of the rider from jar, etc. It consists of

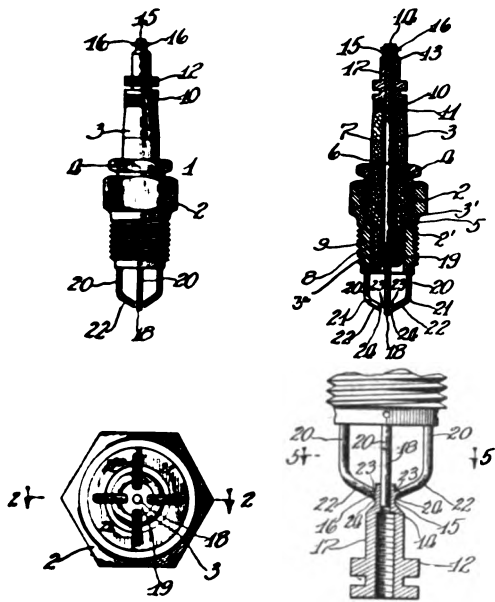


No. 1,030,866—Conrad Grip Handle.

a rubber grip within which are spiral springs, on the end of which is a spade-handle for turning the said grip. The second grip is fitted with a spiral spring similar to that of the first. The grip is positioned with a considerable overhang from the end of the handlebar. The spade-handle position is also to be assumed when a change of hand-position is desired.

1,028,200. Spark-Plug. Patented June 4, 1912, by Chas. C. Eldridge and Edwin J. Beebe, Marshalltown, Iowa. This is a plug with adjustable and readily-cleanable electrodes. There are five electrodes, four radial and one central. The radial ones are fish-tailed at the ends to get a more powerful spark, while the central one is round. A gauge for adjusting the proper distance between the points forms the upper cap on the outside end of the central electrode wire, the points fitting into the notches of the radial electrode ends as shown.

WE have received a subscription from Emil A. Lund, with no address attached. Mr. Lund is requested to send in his address, so that his subscription may be entered.



No. 1,028,200—Eldridge and Beebe spark plug.

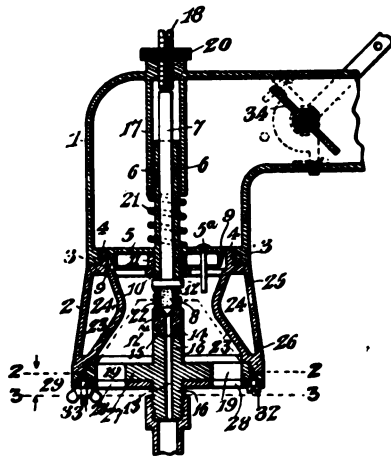
1,030,347. Exhaust Silencer. Patented June 25, 1912, by Zachariah Swearingen, Osceola, Iowa. This is a silencer or muffler with a cylindrical body, flanged heads and partitions adjustable along rods which couple the parts together. The exhaust gases enter against the nose of the cone partition, are deflected around it and pass into the space between it and the straight central diaphragm. This latter is pierced with a rectangular central aperture and extends from wall to wall. The gases continue through the central aperture and pass over the arched surface of the third partition, which like the first, does not touch the walls. They then pass out through the tail pipe. The gases are thus broken up, and any tendency to move in the reverse direction is counteracted by the forms of the first and third partitions, which cause the gases to rebound and continue as before.

1,029,606. Valve mechanism for carbureters. Patented June 18, 1912, by W. S. Guthrie, Terrell, Tex. This consists of a lift valve somewhat on the order of those fitted to generator valves for gas engines, but differing in having a coned face working in a cylindrical opening. The lift or fluid valve works under the suction of the motor, rising as the suction increases and by its form giving increased opening around its periphery. It carries a spring and a needle-valve which acts to open or close the jet opening leading from the float chamber (not shown). The stem of this combined valve is controlled in its movement by a screw at the top of the mixing chamber casing. Means are provided in a shutter for regulating the primary air to the mixture.

1,030,135. Spark-plug. Patented June 18, 1912, by Belisario Silfa, New York, N. Y. This plug has the center electrode remov-

able for cleaning and adjusting, the whole central construction (insulating sleeve, core, electrode proper) being removable by slackening off a gland in the upper portion of the plug body. Cement is used to surround the electrode and the body has a cup or hollow to accumulate soot and the like and thus keep the electrodes clear.

1,032,245. Variable speed gearing for motorcycles. Patented July 9, 1912 by F. W. Smith, Redditch, England. In connection with this device the motor has two sprockets rigidly attached to its crankshaft, each sprocket driving a chain to one of the sprockets shown. These sprockets are loose on a countershaft which runs through the bracket shown, but are fitted with bands which can be expanded by fingers projecting within the hollow formed on the left hand extension of the countershaft. A thimble is operated by pinion and rack within this hollow and by its movement expands either band, coupling the particular sprocket and carrier to the countershaft and driving the road wheel by means of a chain working over the sprocket at the right or far end of the countershaft. An intermediate position gives the free engine, when both chain and sprockets run idle. The gear ratios are dependent on the diameters of the sprockets.



No. 1,029,606—Terrell carburetor mechanism.

FREMONT RACE MEET.

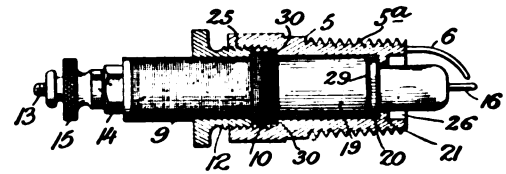
FREMONT, Ohio.—The Fremont M. C. will hold a race meet at the track of the Sandusky County Fair Association on August 18 when a number of well-known riders will compete. There will be both professional and amateur races. The races will be staged by representatives of the Interstate Racing Association.

MAY HOLD ROAD RACE.

WITH a view of reviving the Fédération Internationale des Moto-Cyclistes (F. I. M.), it is proposed to hold a road race in France in 1913 on the lines of the Tourist Trophy races held in the Isle of Man every year. The editor of L'Aero of Paris is the enthusiastic backer of this proposed contest.

WINS AT READING.

IN the twelve-mile motorcycle event held at Jeffersonville, Pa., in connection with the Norristown Driving Club's summer meet, Arthur Bruderreck, on an Indian, won in 15:39. Harry Becker, R-S, and Joe Grossman, Indian, pushed the winner hard, but took second and third place respectively at the finish.



No. 1,030,135—Silfa spark plug.

STEEPEST MOTORDROME IN THE UNITED STATES.

OUT of the sands of the sea, on the site of the old Galveston Flood Building at Coney Island, a new miniature motordrome has been built.

This track is unique in that it is the steepest and smallest ever constructed. The diameter of the bowl is 50 feet at the base, and the side slopes up at an angle of 72 degrees. The sides of the bowl are but 20 feet wide, and the diameter at the top is about 65 feet.

When the saucer was constructed, Mr. Curran, the owner, did not know what to do with the sand which was excavated, and finally he had it thrown behind the track. It proved to be a wise procedure, as the sand settled in behind the boards, making the track practically solid and vibrationless.

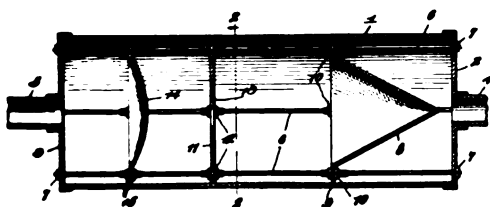
Mr. Curran for some time was unable to obtain riders who had the nerve to ride the track. He now has a corps of nery motorcyclists.

RUTLAND'S FIRST MEET.

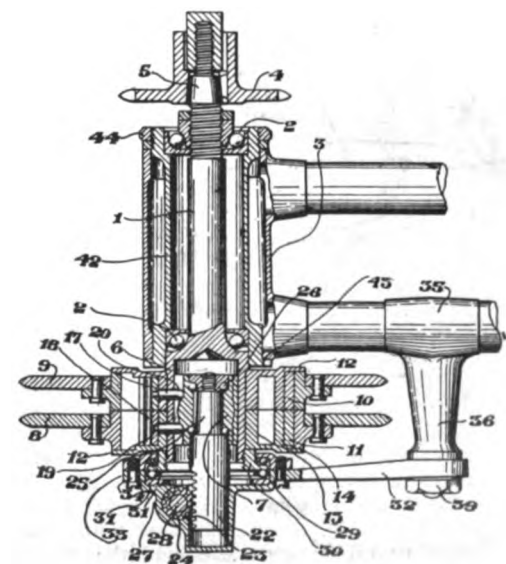
RUTLAND, Vt.—The first in a series of motorcycle race meets to be held on the local fair grounds drew a large crowd of fans on July 25. The feature of the program was a five-mile handicap which was won by Edson, of this city. His time was 7:30. The first race was over the mile route. It was captured by Trudo, of Rutland, on an Indian. Stafford, also of this city, was second on a Harley-Davidson, and Hyde, of Poultny, on a Flying Merkel, was third. Owing to inter-city competition all the events proved interesting and the outlook is promising for future cards.

STOLEN MOTORCYCLE.

ATTENTION is called to the fact that a 4 h. Emblem motorcycle, carmine finish, numbered 4115, was stolen from the agent, Jerry Walling, of Saddle River, N. J.



No. 1,030,347—Swearingen muffler.



1,032,245—Smith variable speed.

QUESTIONS and ANSWERS

BELOW will be found the decisions on Question No. 2, the construction and functions of a spark-plug. The winner is Miss Emma Stone, of 1753 Hague avenue, Merriam Park, Minn., her answer best fulfilling the conditions of the contest. The second prize is awarded to P. F. Lindemann, 1487 Hoe avenue, Bronx, New York, while honorable mention is made of the answer by Roderick Drysdale, of Norwich, Mass.

The number of replies to the questions in this series increases with every new question, and it is much easier for the Editor of the Questions and Answers Department to make a choice if care is taken to give clear and complete answers and unnecessarily long letters are avoided. The answers to Question No. 4, given below, will be published in the September 19 issue.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the second issue following the number in which each question is asked. For example, answers to question Number 2, published in the July 27 issue, are printed in the present issue. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York."

Question No. 3. Describe the operation of a high-tension magneto.

Question No. 4. What is a fly wheel and what are its functions. Answers to Question No. 4 will be published in the September 19 issue.

FRANK

MERRITT

SPARK PLUG DEFINED.

IN answering Question No. 2, a number of writers assumed that the novice was familiar to too great an extent with the electrical equipment of a motorcycle, and hence some really good descriptions had to give place to those which more satisfactorily met the contest requirements. It must be considered that the answer is to enlighten the novice, and be a full statement in the simplest language and having the fewest words. The first prize of five dollars is awarded to Miss Emma Stone, of 1753 Hague avenue, Merriam Park, Minn., while the second prize of three dollars goes to P. F. Lindemann, 1487 Hoe avenue, Bronx, N. Y.

Miss Stone's description is as follows:

"The primary purpose of a spark plug as applied to the motorcycle engine is to cause an electrical spark inside the motor strong enough to ignite or explode the compressed charge of gas.

"This useful little instrument is made possible by that characteristic of an electrical current which causes it to jump to other nearby metal if it comes to the end of the wire upon which it is traveling. The plug must contain three primary parts: First, a center wire or terminal into which the high tension current is carried through a cable from a coil or magneto. Second, an insulating case of mica, porcelain or other non-conducting material must surround the center wire to guard the current and prevent it from jumping to other metal. Third, a substantial metallic outside shell or casing must surround the core and terminate in a point or part very close to the

internal unprotected end of the center wire. This allows the current to jump from the un-insulated point of the wire to the casing, causing the desired spark.

"These three parts are held firmly together by a locknut or other device while the outside casing is threaded to screw into the explosion chamber of an engine."

Mr. Lindemann's definition and description is as follows:

"In order to get a spark from the revolving armature winding of a high tension magneto a spark-gap of about 1-50 of an inch must be provided in the electric circuit of the magneto.

"This function is performed by a device called a spark plug.

"The spark plug consists of a cylindrical shell, into which is fitted perfectly air-tight an insulating mica or porcelain core, through the center of which extends a metal rod. One end of this rod is adapted to receive the magneto cable, while the other end terminates in a point preferably of platinum (whose melting point is 3,227 degs. F.). The shell is also provided with one or more points or electrodes pointing toward the center, and with a thread which screws into combustion chamber of cylinder. Between these points the spark occurs."

Roderick Drysdale, of Norwich, Mass., submitted the following answer, which is considered worthy of publication:

"The spark plug is a simple instrument for causing the spark to explode the gas-mixture in the cylinder of the motor.

"It is made in two parts, a shell and a core. The core fits into the shell, but is insulated

from it so that a connection is allowed only at the ends of the two wires. One wire is connected to the shell and one to the core, the ends being placed 1-32 of an inch apart, allowing the current to jump across, making the spark.

"The spark plug screws into the cylinder either at the top or side of the explosion chamber and can be taken out for cleaning or replacement."

THREE-SPEED HUBS.

H. F. DRAKE.—The Armstrong hub is made by the Armstrong Three-Speed Gear Works, Icknield street, Birmingham, England. The Sturmey-Archer hub is made by the Sturmey-Archer Gears, Limited, Nottingham, England. They are made in sizes up to 4 horsepower machines, and are usually fitted to $2\frac{3}{4}$, 3 or $3\frac{1}{2}$ horsepower mount. They are not at present made for higher powered machines. No American agencies have been established.

MOTOR TYPES.

GEORGE DOUGLAS.—The opposed motor has its cylinders in the same horizontal plane but slightly offset so that two cranks at 180 degs. apart can be fitted. The explosions occur at 0 degs. (number 1 cylinder) and 360 degs. (number 2 cylinder) followed by another 360 degs. before number 1 fires again. The running balance is thus very fine and a motor of this type can be run free up to a high speed before vibrations are felt. There are no motorcycles using this type as yet in this country, but the English Douglas ($2\frac{3}{4}$ h.)

and Williamson (8 h.) are the best known European models.

The 45 deg. twin has the cylinder axes 45 degs. apart, while the firing sequence is: Number 1 cylinder, 0 degs.; number 2 cylinder, 405 degs. Number 1 fires again 315 degs. after number 2. There is considerable vibration in this form, but it is very speedy as far as revolutions per minute are concerned and fits into any frame. It is thus used much more than the better balanced opposed type. The same may be said of the 42 deg. and 50 deg. types.

SMALL STORAGE BATTERIES.

RALPH H. LEFFLER.—Small electric storage batteries are only made by a few firms. Write the Geiszler Bros. Storage Battery Co., 514 West Fifty-seventh street, New York; Philadelphia Storage Battery Co., Ontario street, Philadelphia; Witherbee Igniter Co., Springfield, Mass.; Electrolamp Battery & Ignition Co., 67 Atwater street, Detroit, Mich.

FIFTEEN HUNDRED-MILE TOUR.

GEORGE EDER, a Reading real estate dealer, and George Snyder, a salesman for the National Biscuit Company, left the motorcycle establishment of William Buel, Reading, Pa., on August 10 for a 1,500-mile trip. St. Louis is the objective point, with Pittsburgh, Wheeling and Cincinnati as the principal stopping places en route. The return trip will be made over the same course. The machine used is a twin cylinder Harley-Davidson.

LONG TRIP FOR SHULTZ.

WM. SHULTZ, of Coleta, Ill., returned August 10 from a 34 days' trip through the Middle West on a motorcycle, consisting of about 2,000 miles altogether. He visited at Cedar Rapids, Waterloo and Fort Dodge, Pierre and Aberdeen, S. D., St. Paul and Minneapolis, Minn. He also spent a week at the Cheyenne Indian Reservation in South Dakota.

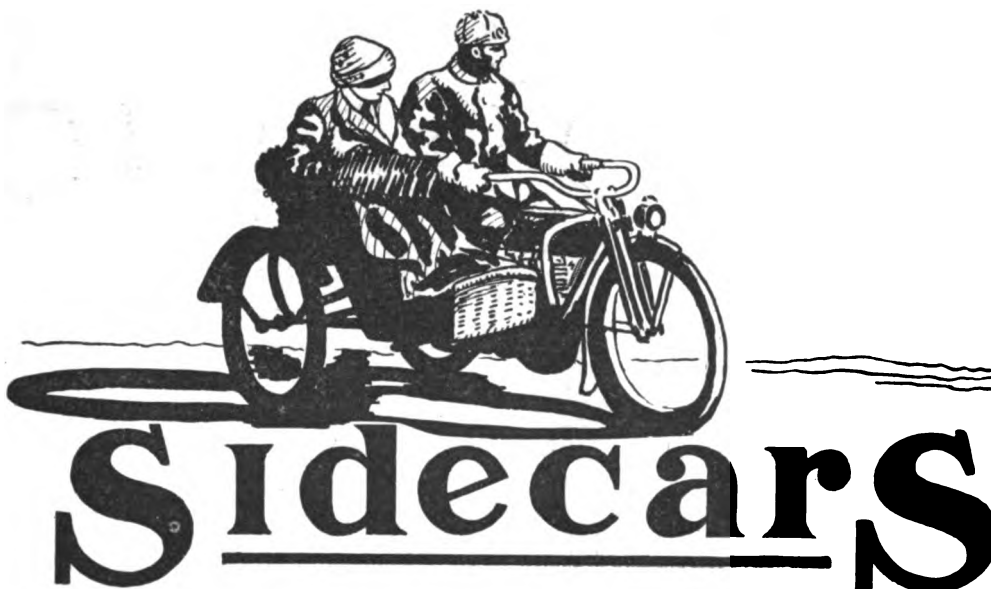


Wm. Bewley, a former racer and road man, who is head tester of the Flying Merkel forces.

SIDE-CAR BODIES.

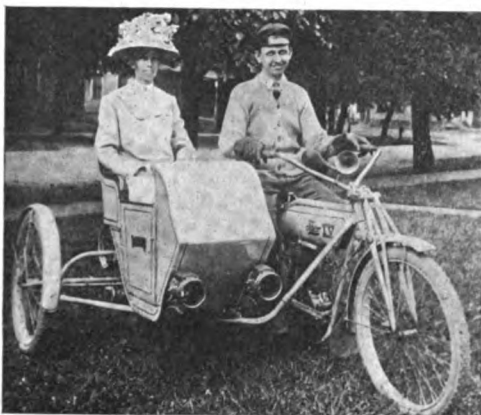
WE should be glad to have the addresses of firms who make side-car bodies to order, singly or in quantity. Inquiries are chiefly about wicker or art-cane bodies.

THE riders of Sunny France are to have a chance to show their ability in an endurance run, August 25, at Fontainebleau, near Paris.



STURDY THOR OUTFIT.

A. FAGERHOLM, foreman of the assembling department at the Thor factory, appears on the machine in the accompanying photograph and his wife occupies the side-car. The machine is a Thor 7, husky enough to take the outfit



over almost any kind of roads, and the passenger attachment is of special design, as comfortable as it is attractive in appearance.

USED IN SPELL-BINDING.

FL. VALIANT, of the Miami Cycle & Manufacturing Co., writes: "My 1913 Majestic side-car and Flying Merkel motorcycle have proved a big boom for the suffrage movement in this country. A few days ago



Miss Louise Hall, who is traveling through Ohio and some of the Southern States in the interests of the suffrage party, came to the plant of the Miami Cycle & Manufacturing Co. to make a speech. She did not have a soap box handy so it was suggested that she make a speech from the side car, which she did. Some of the visiting riders at the plant formed an able bodyguard for her, and during the noon hour she addressed the employees of the plant.

SIDE-CAR ENTHUSIASTS.

HEREWITH are shown 'Gene Coughlin and his fiancée, Miss May Roy, who are enthusiastic New York devotees of the side-car. The paved boulevards of the



metropolis hold little interest for them, and week-ends they can generally be seen exploring the roads in Westchester and neighboring counties with the Merkel and Baxter outfit. Coughlin is the manager of the Riverside Motorcycle Garage, recently opened at 533 West One Hundred and tenth street.

MOTORCYCLES have been ordered by the Forestry Department of Pennsylvania for the use of rangers on the reserves and stations of that State.

TOURING



PORTSMOUTH, VA., TO DETROIT.

A. L. CHASE.—Take route 89 reversed from Portsmouth to Richmond and from Richmond go to Washington, D. C., use route 98 reversed. To Baltimore from Washington take route as follows: Route 96 to Hagerstown, then route 76 reversed to Baltimore or, take route 79, Washington to Baltimore via Colesville (latter half).

From Baltimore take route 77 to Gettysburg, Pa. From Gettysburg take route 53 to Bedford Springs. Go next to Cumberland, Md., a distance of 28 miles over easily followed road. From Cumberland follow route 99 to Pittsburgh, Pa.

From Pittsburgh take route 146 to Columbus, Ohio.; then route 137, Columbus to Toledo. From Toledo go to Detroit via route 111 reversed. Return trip, take route 111 ahead to Toledo, then route 103 reversed, Toledo to Cleveland. From Cleveland take tour 138 reversed to Erie, Pa. Next go along route 29 reversed to Buffalo. From Buffalo, take route 47 reversed to Syracuse, N. Y. For a nice scenic route take number 48 from Syracuse to Watkins Glen, and follow number 68 reversed to Scranton, Pa. From Scranton go to Delaware Water Gap via: 2.2 Gouldsboro; 27.8 Tobyhanna; 32.8 Mt. Pocono; 43.8 Analomink; 49.0 Stroudsburg; 52.7 Water Gap. From Delaware Water Gap take route 35 beginning at Water Gap (98.1 miles).

Follow route 38 as far as Trenton, where go on to Philadelphia via 0.0 Trenton; 9.4 Langhorne; 13.8 La Trappe; 18.9 Bustleton; 26.1 Ogontz; and 35.0 Philadelphia, Penn square. From Philadelphia take route 61 to Gettysburg, and from Gettysburg to Baltimore route 77 reversed. Take first part of route 79, Baltimore to Washington. Take next route 98 to Richmond and 89 Richmond to Portsmouth.

To reverse a route, proceed as follows: On route 98 read Norfolk as 0.0 miles; then West Branch will be 119.6—117.0 plus 2.6 miles; Hodges Ferry will be 6.8 miles, etc.

TO LOS ANGELES.

C. E. PARKER.—Follow old National Road to Columbus, then route 133 (Touring Number) to Springfield; then route 134 to Indianapolis. From Indianapolis take number 214 to Terre Haute and number 241 reversed to St. Louis, Mo. From St. Louis go next to Mexico, Mo., taking route 239; then, following route 230 reversed, go to Kansas City, Kan.

From Kansas City go to Emporia as per route 277. From Emporia go to Plymouth, Saffordville, Cottonwood Falls, Strong, Elm-dale, Clements, Florence, Peabody, Walton, Newton, Halstead, Burrton, and Hutchinson. Take route 226 next to Dodge City, and follow this by route 224, Dodge City to Lamar, Col. From Lamar go to Pueblo, by route

255, taking route 265 to Denver via Colorado Springs.

From Denver take next route 248 to Laramie, Wyo., then 262 from Laramie to Rawlins. From Rawlins take route 266 to Rock Springs. From Rock Springs take route 268 to Evanston, Wyo.

From Evanston go over to Ogden, Utah, and continue on to Kelton via route 250 and 251. Follow route 257 to Cobre, Nev., from Kelton. From Cobre go to Cherry Run, then to Ely, a considerably long run over poor desert roads. From Ely, go to Lida, Nev., over route 249. From Lida follow route 277 reversed to Los Angeles.

SOMERVILLE, N. J., TO TAMPA.

ELLESWORTH D. OPIE.—From Somerville go to Trenton via Harlingen, Kingston, and Princeton, a distance of 29.8 miles over good roads. From Trenton go to Philadelphia via Langhorne, La Trappe, Bustleton and Ogontz. From Philadelphia go to Baltimore via routes 61 as far as Abbottstown and 77 reversed from Abbottstown. From Baltimore go to Winchester, Va., via route 80.

From Winchester follow route 84 to Staunton; then route 93, Staunton to Roanoke. From Roanoke take tour number 88 to Winston-Salem, N. C. Take route 100 next, Winston-Salem to Charlotte. Go over route 324 next to reach Columbia, S. C. From Columbia go on to Augusta, Ga., over route 325. From Augusta go to Savannah via route 335 reversed. Route 326 will now take you to Jacksonville, Fla.

For route Jacksonville to Tampa, follow number 329. Numbers refer to routes in our Spring Touring Number.

TO RURAL RETREAT, VA.

S. F. GRUBB.—Oklahoma is not road-mapped, so we can only give a few directions. Strike across from Claremore to Tulsa, then to Sapulpa, Kellyville, Heyburn, Bristow, Depew, Stroud, Davenport, Chand-

ler, Gow, Warwick, Wellston, Luther, Jones, Munger, Spencer, and Greig to Oklahoma City. You follow the line of the St. Louis & San Francisco R. R. and pass through Tulsa, Creek, Lincoln, Oklahoma counties.

From Oklahoma City take route 245 reversed to Wichita, Kan. Follow route 244 next to Emporia; then take route 227 reversed, Emporia to Kansas City, Kan. From Kansas City take route 230 to Mexico, Mo., and follow this by route 239 reversed to St. Louis, Mo. From St. Louis go next to Terre Haute go to Indianapolis via route 214 reversed.

Leaving Indianapolis, follow route 134 reversed to Columbus, O. From Columbus take route 146 reversed to Pittsburgh, Pa. From the latter city take number 148 to Hagerstown, Md. From Hagerstown go to Staunton, Va., via route 84. From Staunton go to Roanoke, via route 93. From Roanoke follow the Washington Highway through Salem, Elliston, Christiansburg, Newbern, Max Meadows, Wytheville and Crockett to Rural Retreat. The numbers refer to the routes in our Touring Number.

PASSAIC TO LACKAWAXEN, PA.

A. DOLPH KANT.—Go from Passaic to Paterson. From Paterson go to Pompton, then to New Foundland, Hope-well, Sparta, Ackerson, Branchville, Lay-ton, Dingmans Ferry, Riverside, Bushkill, Echo Valley, Shawnee, and Delaware Water Gap, 78.4 miles—macadam roads mostly.

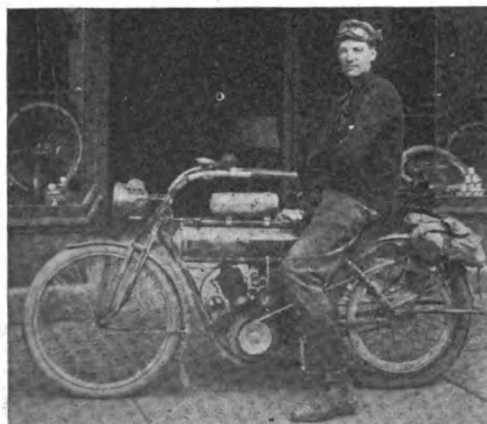
From the Gap go to Port Jervis via Stroudsburg, Marshall Creek, Echo Lake, Bushkill and Milford; go to Matamoras and Port Jervis. From Port Jervis go next to Honesville, then to Mongaup, Pond Eddy, Barryville (cross Delaware), and finally Lackawaxen. Roads good, Port Jervis to Lackawaxen, distance, 22 miles.

PAW PAW LAKE.

B. A. MURRAY.—Paw Paw Lake is in Berrien County, near Coloma. Coloma is 10½ miles to Benton Harbor and about 13½ miles from St. Joseph. Road to Benton Harbor is good. Kalamazoo is 39½ miles to the east of the lake and is a large manufacturing town. At Benton Harbor you are on Lake Michigan and in direct communication with Chicago by water or land. Paw Paw Lake is very picturesque, but the places of interest are few, and local details should be obtained from the passenger agents of the Pere Marquette R. R. or the Kalamazoo, Lake Shore & Chicago R. R.

THROUGH CHEYENNE CANYON.

THROUGH Cheyenne canyon on his motorcycle with the ease of a Pullman train—that's the accomplishment of C. G. Martin, of Wichita, Kan., who recently completed a 525-mile motorcycle trip to Colorado Springs and return. He made the journey in twenty-one hours.



B. M. Anderson, after 2,500-mile Trip from Salt Lake City to Yellowstone Park on a Flying Merkel.

FROM ANGOLA (IND.) TO NIAGARA FALLS.

J. W. CLEM.—From Angola go south to Waterloo via Pleasant Lake, Steubenville and Summit. The roads are good dirt and clay and the distance is 16 miles. From Waterloo strike east through Butler, Bryan (O), Stryker, Archbold, Wauseon, Delta, Holland and Toledo. The roads are good, the distance being 84 miles. From Toledo go next to Stony Ridge, then to Lemoyne, Woodville, Hessville, Fremont, Clyde, Bellevue, Sandusky, Huron, Vermillion, Oak Point, Lorain, Lake Breeze Beach Park, Avon Lake, and Rocky River into Cleveland. Travel is over macadam and gravel roads, the distance being 125.9 miles.

From Cleveland go to Euclid, Wickliffe, Mentor, Painesville, Perry, Madison, Unionville, Geneva, Ashtabula, Kingsville, Conneaut (Ohio), West Springfield (Pa.), Girard, Erie, Wesleyville, Northeast (Pa.), Westfield (N. Y.), Brocton, Fredonia, Silver Creek, Irving, Evans and Buffalo. The distance from Cleveland to Buffalo is 191.7 miles and the roads are good gravel to Erie and gravel with some clay, Erie to Buffalo.

Niagara Falls is 21.6 miles from Buffalo and the route is through Tonawanda, North Tonawanda, Gratwick Station, La Salle Station. The roads parallel the Niagara river and are fair-to-poor dirt.

STATEN ISLAND TO JAMAICA, L. I.

B. F. BRYANT.—From the Bay Ridge avenue ferry go on to Fort Hamilton Parkway, and continue along the Parkway (to the left) past the intersection with Ocean Parkway to Prospect Park entrance. Go through Prospect Park heading for the Plaza (Memorial Arch, Eastern Parkway and Flatbush avenue). At Plaza turn right and follow Eastern Parkway to end, where turn right into Bushwick avenue. Follow Bushwick avenue to Evergreen Cemetery and turn left into Highland Boulevard. Continue along this route, going into Jamaica avenue. Follow Jamaica avenue to Shaw Parkway, where turn left and continue until Forest Park Turnpike is reached. Go right into Turnpike and follow to intersection with Hoffman Boulevard, where turn right and ride to intersection with Hillside avenue. Ride along Hillside avenue. Take Merrick road from Hillside avenue (Jamaica).

WICHITANS CAN RIDE DOUBLE.

WICHITA riders can carry a passenger on a motorcycle built for one only, as the ordinance prohibiting the practice has been repealed. A new ordinance is proposed prohibiting passenger-carrying on Douglas avenue between Water and St. Francis streets, and on Main street, between First and William streets. Thus if either of these streets is to be crossed, the passenger must alight and cross on foot. The new bill is the outcome of efforts of the Wichita M. C. to have the old ordinance repealed entirely.

FINISHED FORTNIGHT'S TOUR.

EDWARD LANGLEY and Robert Turnbull finished a two weeks' tour from Manchester, N. H., on August 8. The route was through Peterborough, Keene, Rutland, and Burlington, Vt. Turnbull took a side trip to Canada but rejoined his companion at Burlington, when both returned to Manchester.

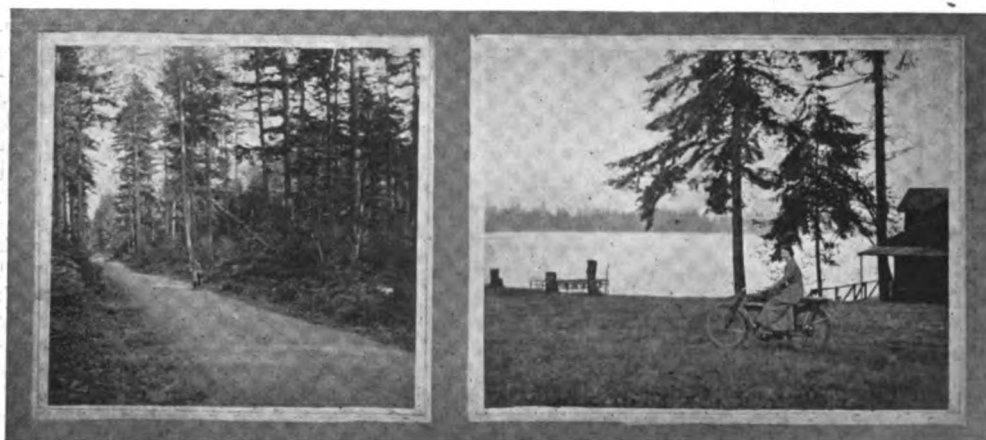


Miss Lillian Hauerwas, Who Recently Made Round Trip Between Chicago and Milwaukee.

ROUGH ROUND TRIP.

MISS LILLIAN HAUERWAS has the unique distinction of being the first lady rider who negotiated the rough roads between Chicago and Milwaukee successfully. Accompanied by Roy Bowser, Miss Hauerwas made the round trip on her Harley-Davidson recently, and encountered practically a continuous series of roads of which the term "poor" gives but an inadequate description. This was the case especially south of Milwaukee and Kenosha; near the latter city, the farmers having apparently clubbed together and "worked out" the roads, with the result of having lumps all over and these covered with loose stones. On one stretch in particular there was no side-path and Miss Hauerwas rode it without trouble.

The stretch in the photograph is a specimen of the sandy surfaces encountered, but does not show the worst parts of the trip. Although no attempt was made to establish a record, the pair made the out-trip to Chicago in 4 hours and 50 minutes, and the next day returned to Milwaukee in 4 hours and 25 minutes. The fair rider traversed the roads without having her ardor dampened in any manner, and while in Chicago took a number of side trips, so that her total mileage was 255 when she reached Milwaukee again.



Road and Natural Beauties Near Tacoma, Wash.

POSTING CANADIAN ROADS.

THE Ontario Motor League has sent out two pathfinders to post up a number of Ontario's highways and to report on the condition of roads. Both "scouts" are motorcyclists, being members of the Toronto Motorcycle Club. They are Dan Davis, Indian, and Walter Stoner, Triumph. They have been covering 100 miles a day.

TO RIDE TO NATCHEZ.

ROBERT ELDRIDGE, a deaf mute printer, with his bride, left Rome, N. Y., on August 9 to ride to Natchez, Miss., where the couple will make their future home. The route taken is 1,600 miles in length. The groom will be associated with the News Publishing Company, of Natchez, subsequent to his arrival.

TEN-MILE SPEED LIMIT.

An ordinance limiting the speed of motor vehicles to ten miles per hour has just been passed in Medford, Okla. Fines of from five to twenty-five dollars plus costs will be inflicted for violation of this ordinance.

BAKER BREAKS RECORD.

E. G. BAKER, of Indianapolis, lowered the record for the half-mile dirt track at Dayton, Ohio, on August 10, his time being 1:12½ for the mile. This creates a new record, the former one being made by Don Klark, of Columbus. Baker's figures are expected by local authorities to stand for some time to come, as the track is a hard one to ride. In addition to the time trial, Baker took first in the ten-mile free-for-all, and second in the five and ten-mile open events.

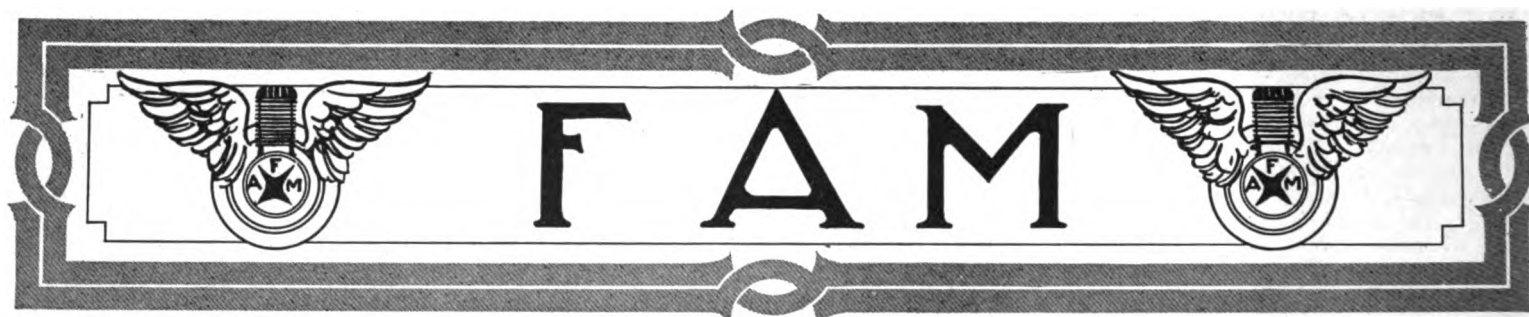
USING GARGOYLE OIL.

Announcement is made that Gargoyle Mobiloil "B" is being used for the racing machines at the Brighton Motor-drome, and that it is giving entirely satisfactory results under the unusually trying conditions which prevail on the big bowl.

AN ALBUQUERQUE PROGRAM.

MOTORCYCLISTS and dealers in Albuquerque, N. M., have made arrangements for a race meet to be held on September 2, at Traction Park. A card of fifteen events will be presented, ranging from one to fifteen miles.

H. J. DE TURK, formerly of Reading, Pa., but now of Los Angeles, finished a two weeks' trip from St. Louis to Los Angeles, arriving on August 1.



FROM THE CANADIAN VIEWPOINT

Dominion Officials and Riders Studied F. A. M. Convention Methods and Carried Home Many Pointers For Their National Organization.

DURING all the hip-hip-hurrah of the F. A. M. national assembly and championships at Columbus, Ohio, last month, a delegation of a score or more of Canadian motorcycle men, including a dozen riders, all associated with the recently-organized Canadian Motorcyclists' Association, were quietly and intently making notes of everything they saw for the express purpose of developing their own Dominion organization. These prime boosters of the organized sport in Canada had seized the opportunity to perfect their own highly prized body and judging by the tales that are now being told on the Maple Leaf side of the border, good work was made of the mission.

The F. A. M., as seen through Canadian goggles, appeared more mighty than ever, following the experience of the Columbus meeting. The Canuck rider rubbed shoulders with the Californian, shook the hand of the Floridan and conversed with the New Englander—and all were F. A. M. boosters. Surely the Federation was an organization, a part of which any rider should feel proud to be.

Practically strangers to the organized motorcycling sport, the Dominion delegation took home with them many valuable pointers. Incidentally the "foreigners" enjoyed their "big week" at Columbus, even while they were conducting their missionary work. Several of the officers of the C. M. A. made it a point to meet the big manufacturers in order to advertise the existence of the Canadian Association and to prove that motorcycling is being placed on a high plane in the Land of Snows.

The effect of holding a big "National Carnival" was strikingly proved to the Northerners during their stay in the Ohio Capital. Much publicity for the sport was gained along the routes of the four National tours and reports of the Assembly were published generally. The present members of the Federation were shown that the body was very active and alive to the situation and many new members will now be induced to join. The manufacturer and the rider also got closer together.

Ten of the Canadians rode to Columbus in the Northeastern tour, joining in at Buffalo. These riders got stuck on American highways, especially those of Southern Ohio, in every sense of the word. Frankly, the Canucks looked for a highly-developed system of public thoroughfares and were sorely disappointed. It is needless to say that every member who took part in the Northeastern tour anyway became an ardent

supporter of the Good Roads' movement, as a result of this experience.

One criticism was forthcoming for the management of the tours, and this was aroused over the neglect of the Federation officials to make better preparations for the trip. No pathfinders were sent out to discover the best routes and the path of the tours were not posted to aid the stragglers in keeping on the right roads. Many of the latter lost their way completely on a number of occasions because the routes were not marked. The official printed schedules were also far from correct, the times allowed being impossible and the distances too short. The more experienced riders hit up far too fast a pace for the beginners, in attempting to live up to the time-tables.

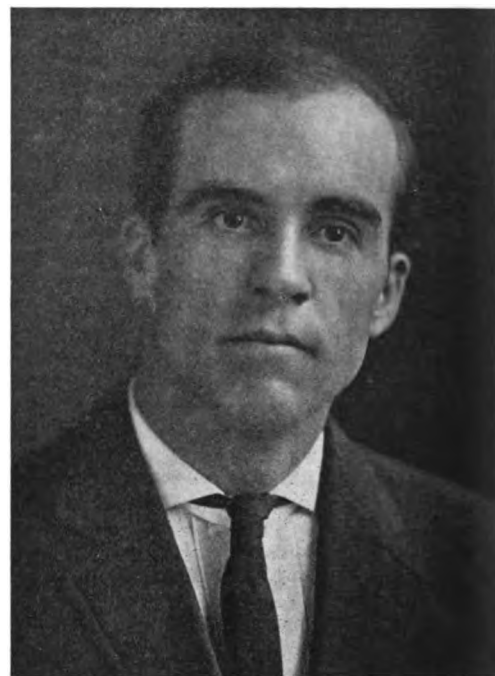
The Canadian "Flying Squadron" did not exactly appreciate the method of holding "stump court" as practiced by county and town constables of Ohio. In several instances, riders were nabbed for really minor offences and were relieved of good cash by the officers of the law on the spot in real "highway" fashion. "Why, he wouldn't even give me a receipt for my good money," was the way one offender expressed himself after undergoing a constable ordeal.

"One thing has been impressed upon me since going to Columbus," declared Mr. K. R. Spencer, of Hamilton, president of the C. M. A., "and that is, that the manufacturers have got to pay a great deal more attention to the Canadian Association in future. I refer, particularly, to the Canadian manufacturers, who have been doing practically nothing for us. With affiliated clubs located from Montreal in the East to Winnipeg in the West, we are getting to be a factor in motorcycling circles. Look how the big United States manufacturers helped to make the F. A. M. convention a success; look at the way they lavished souvenirs upon the delegates; look at the great, big time everybody had together. It is up to the producers to treat the Canadian Association better in future."

"Before I went to Columbus, I was interested in a scheme to erect a board track at Hamilton," Mr. Spencer went on, "but after my first experience in board track racing I have changed my opinion. The board bowl is capable of allowing a tremendous speed, but otherwise riding on the dirt is more spectacular in my mind." Other members of the Canadian delegation are of the same opinion as their leader.

The Canadian visitors who were present at the Federation gathering included K. R.

Spencer, of Hamilton, president of the C. M. A.; F. A. O. Johnston, president of the Toronto club; Nelson Chambers, of Hamilton, and H. M. Kipp and wife, of Toronto, both of the trade; Mr. McCutcheon, of the London, Ontario, club; T. I. Anderson, secretary of the C. M. A., and R. M. Jaffray, of Montreal.



E. R. JENKINS,
F. A. M. Commissioner for Iowa.

NEW AFFILIATIONS.

THE latest club affiliations: Michigan City (Ind.) Motorcycle Club; J. E. Edsall, secretary, 12 members; Champaign Motorcycle Club, Champaign County, Ohio; secretary, F. A. Harenburg, 22 members, 100 per cent.; Victoria Motorcycle Club, Victoria, B. C.; L. W. Lillie, secretary, 21 members, 100 per cent.

ANOTHER REWARD PAID.

SECRETARY G. B. GIBSON has just paid the seventh reward offered by the F. A. M. for the recovery of a motorcycle stolen from a member of the Federation. This time the reward of \$25 went to Police Officer L. J. Wonderly, of Topeka, Kan., who discovered the thief and stolen motorcycle of a F. A. M. member, Dr. C. M. Hensley.

This plan of awarding \$25 to the person recovering a stolen motorcycle of a F. A. M. member was inaugurated some time ago by the Federation in its efforts to promote the interests of motorcyclists. Since that time seven machines have been recovered and several of the thieves have been sentenced to serve long terms behind the bars.

MUD-PLUGGING IN CANADA

Calgary Riders Have a Rather Harrowing Experience With Alberta Roads.

ON Saturday, August 3, five of us started from Calgary for a point on the Ghost river about fifty miles from town, where the fishing was reported to be good. We carried blankets, grub, our trusty .44's and our fishing tackle, intending to make camp at our destination a few hours after our start, which was at 3 p. m. About fifteen miles out of town we saw a dark cloud approaching, and as we had any number of roads to take, my partner and I turned off, and the others went straight on, they intending to meet us at Cochrane, a town about twenty-five miles from Calgary. It so happened that we went around that cloud, and they went under it. We ran into a little rain, but not enough to even wet the belts. We got into Cochrane, repaired a puncture, docked the machines at a garage and went to the main hotel, where we had our "ham and."

After about an hour and a half we heard a "putt-putt-putt" outside and there was one of our party. He was, to say the least, WET. Everything he had with him, even his tobacco, was soaked. Another half hour and the other two came up, with mudguards tied onto their handlebars. It goes without saying that they, too, were wet. The next morning my partner and I went out, but nothing in the way of three dried-out motorcyclists and machines could be found, so we went on towards Ghost river. After we had gone about eight miles we ran into a heavy shower, so we turned around and went back to Cochrane. By the trail we could see that no motorcycles had gone along the road we were traversing in the last day or so. Arriving at Cochrane we met two other motorcyclists from Calgary who had come out that morning. As it looked like "some" rain, we had made up our minds to go back, but now that there were four of us, nothing would satisfy one of the boys (who, by the way, is an excellent cook) but that we have a chicken dinner. We did not know whether the other three had gone back to town the night before or not, and what is more, we did not care. We found the butcher's residence, got two nice chickens, some butter, bread, potatoes, salt, etc., and then made our way to a dump heap about a mile out of town. There were all kinds of tins, gasoline cans and sticks of wood, so we went to the river and found a nice place under the bridge where we scoured out our "china" and proceeded to get busy. Such a dinner! About eight courses. We started out with some fruit cakes, went on down through the spud and chicken course to strawberry jam on toast. Our courses may not have been in the order that society calls for, and as we only had one knife and fork, our manners would have shocked some of our stylish friends, but we were hungry, and that ends the argument.

About 4 p. m. we started for Calgary, making "haste" in a way that made the dust fly. We had gone about five miles when we ran into a heavy shower. That stopped proceedings for a while. I had a new flat belt, which was tight, to say the least, and it was necessary for me to open the machine out wide in the stand and then let her down in the mud and hop on. My partner and I made about a mile and a half in an hour; he could have made more, as he had a two-speed machine, but he stuck by me, and the other two went

on. The roads are all right here when they are dry, but when they are wet, give me an airship. After a couple of hours the roads were half-way decent, except in spots, and so, after cutting down a few fences and riding in the fields a while, we were able to hit the main road again.

Then came another rain storm, which made the machines worse than useless. We left them and walked about a quarter of a mile to a farm house, where we learned that our other two friends had gone through some time before. After gulping down eight glasses of milk, a little well water and a little slough water, we went down and got the machines, put them in a shed and began to think of what a nice place home was after all. Darkness was falling, and thirteen miles from home. It so happened that the farm house we stopped at was a rural telephone exchange, and as everybody knows everybody else's business, our hostess told us that there was a five-passenger Ford about three miles out the road we had come, which had been there all the afternoon on account of a blow-out, and that a seven-passenger Chalmers was at that moment on its way to the assistance of the Ford. We waited until the Chalmers came along, hopped in and "fixed" the driver with a couple of cart-wheels each, and then directed them to the Ford, as they were apparently lost. The tire was soon fixed and both cars started through the mud. The Chalmers had two oil lamps and the Ford had one oil lamp, and the night was very black, but that didn't seem to worry the drivers. That was the worst ride I ever expect to take. We banged over bridges, around curves, through puddles of water at a speed of about 25 miles per hour, and only twenty feet behind the other car. I felt inclined to say something to my partner in a loud aside about reckless driving, but thought better of it, and trusted to luck and the mohair top to keep us from getting thrown out. At about 2 a. m. we reached town and then proceeded to clean up everything in sight at a nearby restaurant. As the street cars do not run after midnight, it was a little walk of two miles to my house, and then only four hours of peaceful slumber until the alarm clock said something about getting up.

The rest of our party, we found later, had got about three miles closer into town than we had, and then the rain storm, which had been our Waterloo, overtook them and they shoved the machines in another farmhouse. At the farmhouse they met two of the three that got lost, the third having gone home in the morning. The four of them got a rig and drove in, arriving in town about 11 p. m.

Now I am not a pessimist, but I don't call that fun, especially when a 200-pound machine with 50 pounds of baggage has to be pushed several miles through mud. Still, if it was to be done over again, I might—, but no use saying it, all the boys would do the same thing if they were in our places. However, next time we will have weather reports from north, south, east and west for about forty-eight hours ahead before we attempt any more "joy-runs."

L. M.

IN DELAWARE.

THE Wilmington Motorcycle Club is constantly increasing in membership and many long reliability runs are planned for the balance of the season. The club recently held a run to Augustine Beach, N. J.

F. A. M. BUDGET

Made Up By Directors At a Meeting in Detroit and Submitted to President.

THERE was a meeting of the Board of Directors of the F. A. M. at Detroit during the week of the Cycle Trades Convention.

G. H. Hamilton presided and J. Leo Sauer acted as secretary. There were also present Directors French, Willis and Thornley, or five in all, constituting a quorum.

Although, under the circumstances, the directors would have been justified in taking final action on all matters coming before the meeting, they decided simply to voice their wishes in the form of recommendations to the president, said recommendations to be sent out to all the directors for their approval. These recommendations follow:

That the organization set aside for the expenses of the office of the chairman of the Competition Committee, including rent, heat, light and stenographic services, the sum of \$2,750 for the fiscal year 1912-13, to date from July 15, 1912. The payment of this sum is contingent upon its being taken out of the receipts of Chairman Thornley's office.

The board voted to increase the allowance to Secretary-Treasurer Gibson from \$1,000 to \$1,200, and that of Mrs. Minnie Gibson from \$520 to \$600 per annum, effective July 15, 1912.

The board favored Secretary-Treasurer Gibson's suggestion to enter into a one-year lease for office facilities in Westboro, with the privilege of renewing for two years more, in one-year terms, the rental to be \$200 per annum. The board also favors the purchase, by the secretary-treasurer, of a fire-proof cabinet instead of a safe, the cost not to exceed \$100.

The directors went on record as favoring an allowance of \$520 a year to the president for stenographic services.

The board recommends the appointment of Mr. J. H. Donehue, of New York, to manage the newly-established Touring Bureau.

NEW SHOPS REGISTERED.

TO the ranks of the F. A. M., Registered Shops, the following are added, according to advices from Westboro, Mass.: The Motorcyclery (W. H. Schmidt), 131 Main st., Chico, Cal.; Ralph M. Leonard, 214 W. Main st., Somerville, N. J.; Clinton E. Peiffer, Covington, Ohio; Charles E. Farr, Canastota, N. Y.; Stricker & Son (Grant Stricker), Laura, O.; Hall Cycle & Plating Co. (Lawrence Hall), 417 Franklin st., Waco, Tex.; Our Bike Shop, C. E. Kern-L. N. Tussing, 124 W. Cortland st., Jackson, Mich.; Anton M. Jorstad, Fergus Falls, Otter Tail, Minn.; Belmar Cycle Exchange (W. H. Reynolds), 1106 F st., Belmar, N. J.

AUGUST AFFILIATIONS.

NATIONAL SECRETARY GIBSON announces the following affiliated clubs for the month of August: Jerome—Jerome, Ariz., M. H. Hawkins, Jerome, Ariz.; Chico—Chico, Cal., Harry Bertholf, 78 Sixth st.; Waco—Waco, Texas, Lawrence Hall, 2700 Sanger st.; Park Region—Fergus Falls, Minn., Harry K. Bergerud; Black Hills—Lead and Deadwood, S. D., P. D. Shoenberger, 766 Main st., Deadwood; Pensacola—Pensacola, Fla., L. W. Wells, Y. M. C. A.; Morrow Co.—Mt. Gilead, Ohio, H. R. Crock.

AMONG THE CLUBS

PEORIA OFFICERS.

THE Peoria (Ill.) M. C. at its last meeting elected the following officers: William Voss, re-elected president; Richard Barbour, secretary-treasurer; Mark Olsen, press agent and Harry Reese, captain of tours. The club will hold its fourth annual race meet on Labor Day.

BIG TIME IN 'FRISCO.

CHIEF HOPKINS will entertain Indian riders at an Indian Pow-Wow at Fernbrook Parks, San Francisco, September 8. According to the announcement issued recently, the pow-wow will include music, dancing, a feed, prizes, in fact, a good time all day. All Indian riders are invited.

ANOTHER IN FLORIDA.

PENSACOLA (Fla.) riders organized recently, electing the following officers: President, Dudley C. Barrow; vice-president, Philip M. Yonge; secretary-treasurer, L. W. Wells; captain, E. C. Hinman.

THE Flower City Motorcycle Club, of Rochester, N. Y., held its first picnic of the season at Avon on Sunday, July 28. Athletic games featured the program.

WILLIAM ALLEN, a member of the New Jersey M. C., of Newark, N. J., is on a vacation trip by motorcycle through New York State.

Marion, Ind., claims over one hundred motorcyclists.

HOLD ANNUAL REUNION

1,500 Enthusiasts Gather at Transbay Course in California.

LIVERMORE, Cal., August 4.—With an attendance of 1,500 motorcyclists, the second annual reunion of the Associated Motorcycle Clubs of Central California was held here today. Races, games, dancing and a barbecue were the diversions of the day provided by the committee of arrangements, of which I. W. Story was chairman.

Two races were held on the seventeen-mile course, which extends from Livermore to Santa Rita and Pleasanton and back to this city.

Riders were present from San Francisco, Oakland, Alameda, San Jose, Stockton, Sacramento and other points about the bay. The races were opened with a big motorcycle parade at 1 o'clock this afternoon. After the races were finished a barbecue was served in the I. D. E. S. park, and a dance closed the festivities this evening. The local committee was composed of J. O. McKown, E. W. D'Ombra, W. Schaefer and George Beck.

CHICAGO CLUB GIVES DANCE.

THE Chicago M. C. gave an entertainment and dance to members and friends Saturday evening, August 10, at the clubhouse. The affair was largely attended and everyone enjoyed a most delightful evening. The clubhouse was beautifully decorated for the occasion.

UNIQUE TOURING CLUB.

H. S. HODGKINSON, an Indian sub-agent of Toronto, has formed a very original club for the benefit of motorcyclists who desire to go on short trips. The organization is known as the Riverside Touring Boys, and several invitation tours have already been held. The rules governing these trips include the following:

Riders must not forget that gentlemanly conduct is absolutely necessary.

Members will start in pairs, each man wearing a number. The low numbers start first, and a high number cannot pass a low number.

When a turn is made, or an obstruction is met with, one of the leading pair must stop to warn the following riders.

Pairs are asked to ride at least a quarter of a mile apart. Disregard of captain's instructions cancels all privileges.

The promoter of the club always brings up the rear and stops to aid a rider in trouble. A charge of \$1 is made for every trip, to provide for hotel accommodations.

O. F. M'LAIN PRESIDENT.

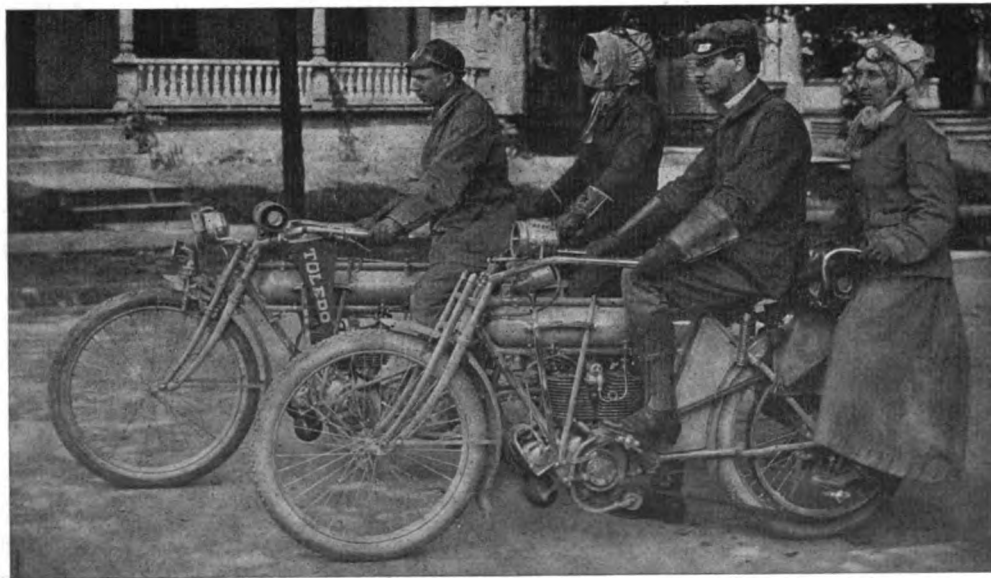
INDIANAPOLIS, August 19.—O. F. McLain has been elected president of the newly-organized Indianapolis M. C. An enthusiastic meeting was held in Morrison Hall and there were twenty-six riders in attendance. The dues were set at 50 cents a month.

John Merz was elected vice-president. Charles Wyatt defeated John Kinney for treasurer job, and Robert Sturm was chosen secretary. The following tradesmen were put on the board of directors: G. H. Westing, Gus Habich, John Kinney, W. A. Harding and F. I. Willis.

Although only twenty-six riders joined at the initial meeting, John Kinney is authority for the statement that 300 riders signed the petitions for a club, and that the membership is expected to pass the one hundred mark very soon.

NOW ABERDEEN CLUB.

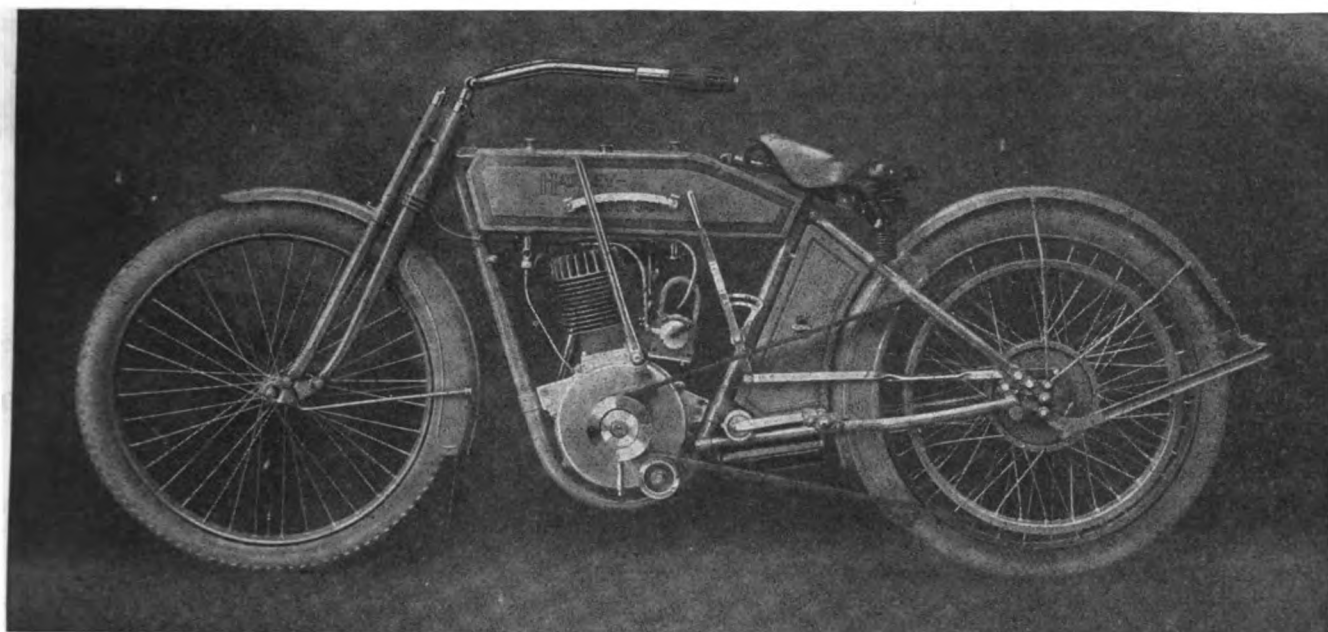
AT a meeting of the Dakota M. C. on August 12, in the Bushnell building, Aberdeen, S. D., the club was reorganized and is now the Aberdeen M. C. The old by-laws were altered to fit the requirements of the new organization and plans for runs laid out. The club is to affiliate with the F. A. M. in the near future. Following are the officers: President, Kirk Roberts; vice-president, Walter Harrison; secretary, E. P. Neill; treasurer, Arthur Cole; captain, Oscar Olson; first lieutenant G. E. Petrick; second lieutenant, V. C. Blanchard. Edward Knee and P. N. Bushnell were elected on the executive committee with the officers chosen.



ON A CLUB OUTING.

IN the accompanying photograph appear Walter Dreher and wife and R. L. Hinds and wife, of Toledo, Ohio, who participated in a run held by the Yale M. C.,

of Toledo, on June 23. The picture was taken just after the arrival of the tandem outfits in Mansfield, the turning point for the club run. Mr. and Mrs. Hinds appear with their machine in the foreground.



“I Have Ridden my 1910 Harley-Davidson 20,609 Miles and it is in A1 Condition Today.”

**J. N. HOWE, Supt.,
Electrical Department,
Northern Indiana Gas & Electric Co.**

No motorcycle in which quality and service are only secondary considerations could render service like that.

Thousands of Harley-Davidson riders have received the same satisfaction as Mr. Howe and many could write testimonials even stronger than his.

Good material and careful work cost more than cheap material and indifferent work, but neglect either one of these and the owner is the one who will really pay for it.

Correct design coupled with the right material and careful workmanship have made the Harley-Davidson's reputation.

“COSTS MORE, BUT WORTH IT”

Harley-Davidson Motor Company

260 C Street

Milwaukee, Wisconsin



DEALERS



GOVERNMENT SALE.

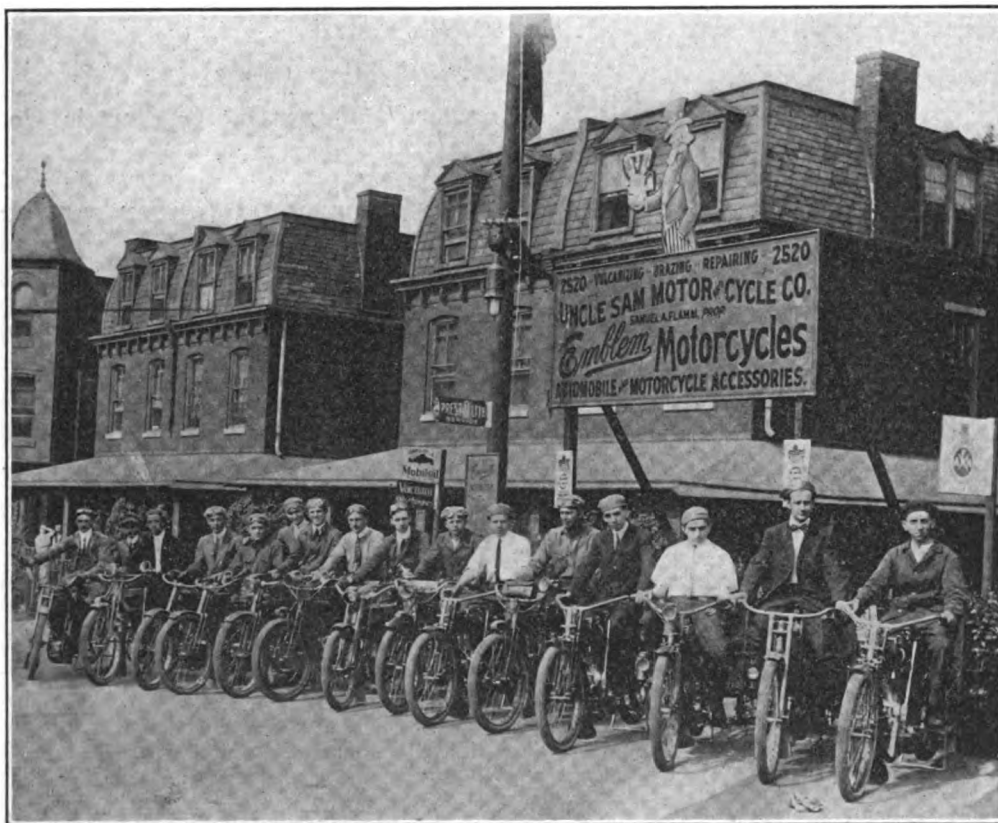
ALEXANDER KLEIN, No. 2204 North Broad street, local representative for the Harley-Davidson Company, has recently been awarded a contract by the United States Government to furnish the motorcycles for the coal inspectors at the League Island Navy Yard, Philadelphia. Mr. Klein reports business to be in a very healthy condition, and indications are that it will continue until late in the season equally strong. The indications for 1913, says Klein, are nothing less than brilliant in Philadelphia.

TUCKER MAKES A CHANGE.

H. J. TUCKER, who has been "inside man" for L. J. Mueller, Indian agent in Cleveland, Ohio, for the past year, has identified himself with the Buckeye Motor & Cycle Company, of Akron, Ohio. Mr. Tucker has bought an interest in that firm, and will handle the purchasing and sales department. Mr. Tucker has been in the motorcycle and sporting goods business for eight years. The Buckeye people sell the Indian and Flying Merkel machines.



The W. E. Wandersee Store in Detroit.



S. A. FLAMM, Emblem agent in Philadelphia, Pa., has a broad-gauge idea as to what constitutes good fellowship in motorcycle circles and does not believe that a dealer should restrict his attentions to riders of the particular make of machine in which he is in-

terested. In the accompanying photograph, taken in front of Flamm's establishment, there are several makes of machines in addition to the Emblem and their owners all feel that Flamm is a pretty good sort of a chap to know whether you ride or not.

FOR PHILADELPHIA POLICE.

GEORGE S. MASLEN, No. 2206 North Broad street, Philadelphia, representative of the Indian machine, has just received a contract to supply the Philadelphia Police Department with fifty additional machines. Mr. Maslen says: "Business has increased 400 per cent. over last year, and I have not really caught up with the orders so far this season. The prospects for a busy fall season are very encouraging."

W. G. RHODES, No. 2210 North Broad street, Philadelphia, has received additional orders from many public service corporations using the Reading-Standard machines. The United Gas Improvement Company and the Philadelphia Electric Company have both recently placed additional orders.

BIG INCREASE IN COLUMBUS.

COLUMBUS, O.—The records of the city auditor of Columbus, O., show that up to August 16, licenses to the number of 856 were issued to motorcyclists, while the whole number issued in the year 1911 was 533.

THE TORONTO TRADE.

PERCY A. McBRIDE has just secured his third order for six Excelsior motorcycles from the Hydro-Electric Commission.

Walter Andrews is negotiating for the Toronto agency of the Detroit Triumph.

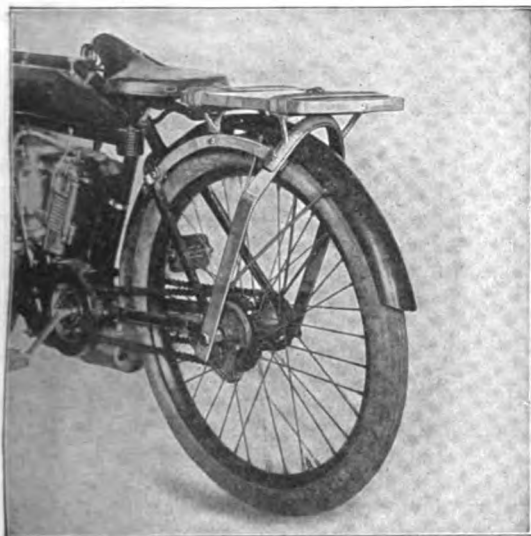
Max Amoss, the popular Flanders dealer of Toronto, is expanding. He has taken over an automobile tire agency and vulcanizing plant and is opening a bicycle branch department in his new premises on King street West.

Tandem Attachments



Worthy Of the Name

Model 2.



MODEL 2

Combined Luggage Carrier and Tandem Seat

Exceptionally strong and well made. Top or platform hardwood, with binding of $\frac{3}{4}$ -inch channel steel. The smooth flat top can be used with or without cushion. No rivets. Rear stay is one continuous arch of $1\frac{1}{4}$ x $\frac{1}{4}$ -inch spring steel. Top secured by malleable iron brace fitting over top of arch. Guaranteed to carry any weight axle will hold. Price, complete, highly-nickel-plated, \$7.00.

MODEL 47

The biggest value for the money ever offered. The luggage carrier is our Model 2, with the rear arch extended and formed into foot-rest. Cushion is our Style B, spring top, an extremely comfortable seat. Very light. Combination attachment, complete, with skirt-guard and spring top cushion, \$8.75.

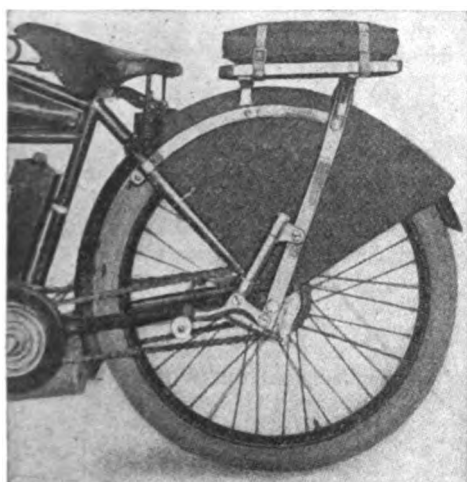
Model 47.



MODEL 25

This equipment may be put on in a few minutes and make an ideal passenger carrier. The weight of the extra rider is placed well forward, making it very easy for the driver to control the machine under all conditions. For the motorcyclist who desires an all-around outfit, here is the best and only one of its kind on the market. Built by motorcycle men who know. Model 25, complete, as shown, \$12.00. Model 25, less carrier, \$5.00.

Model 25.



Model 1.

MODEL 1

Readily attached to any motorcycle. Made of $1\frac{1}{4}$ x $\frac{1}{4}$ -inch spring steel. Non-breakable and non-twistable handlebar. Low, comfortable saddle position. Foot rests on spring pedals, well forward, whose wonderfully smooth action absorb all jars and assures the permanent foothold on the pedals. Model 1, price, complete, as shown, fully nickel-plated, \$15.00; without saddle, \$12.00.

Ero Stand Latch

The Ero stand lock not only does away with all soiled hands from locking and unlocking stand, but is a positive lock, preventing the stand from falling out on the road. Just press the trigger with the foot, when the stand will instantly drop out.

If the stand is lifted into position with a spring, it is then only necessary to press the foot, first upon the trigger to release the lock, and then follow the pressure down till the stand strikes the ground.



It is readily and easily attached by the same screws or rivets that attach the clip spring to the mud guards, requiring no extra screws or bolts. No. 116, price, complete, postpaid, 50c.

Note—Clip not included.

Catalogue on request

ERO MANUFACTURING COMPANY

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Excelsior Auto Cycle Co., Detroit, Mich.
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Stanley Kellogg, Bridgeport, Conn.
New York & Brooklyn Auto Supply Co., New York City.

ACROSS CANADA

Hazardous Journey Contemplated by Harry Humphries and Wife.

CANADIAN riders are looking forward with keen interest to the proposed attempt of Harry Humphries, the marathon runner, and wife, to cross the Dominion of Canada as part of a world-girdling trip, on a Minneapolis 5 h. two-speed motorcycle and "trailer."

This ride, though much talked of and often proposed, has never been accomplished or even tried by motorcycle, and the general view is expressed on the Canadian side of the border that if Humphries succeeds in conquering the Canadian coast-to-coast trip, the remainder of the journey will be like a slide down a chute at an amusement park. Volney Davis saw the two oceans in less than a month by riding through the States, but it is prophesied that Humphries will not cross the Dominion in less than two months.

Very few long rides have been accomplished in Canada for the simple reason that the different populated portions of the country are thoroughly isolated by natural barriers. There are of course transcontinental railroads, but these are the only links, and Humphries will often have to ride the ties.

The Canadian Rockies cut off British Columbia in the far west. The vast prairies, with their Indian trails, come next, but the middle Provinces are separated from the well-populated east by as difficult an obstacle as could be imagined, namely, the virgin wilderness of northern Ontario, where untrod forests, rocky country, countless streams and picturesque lakes, so cut up the stretch that roadways are few and far between. In fact, the roads extend for only a comparatively few miles outside each town and otherwise there would be nothing for the Humphries to do but make their own path or take to the railway tracks.

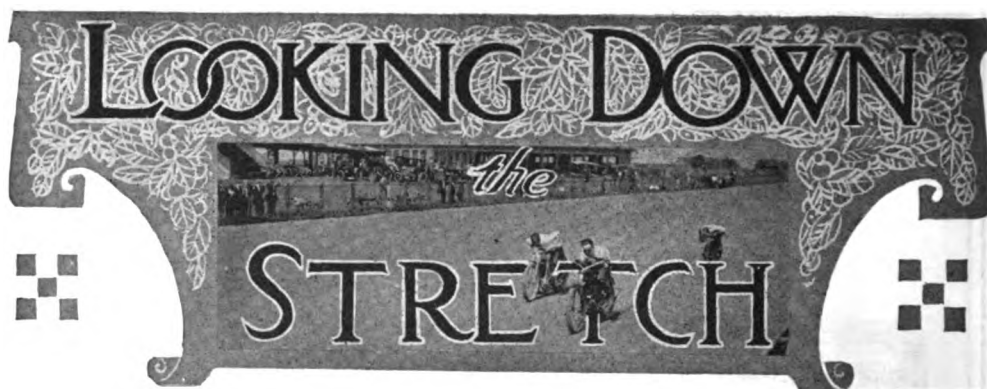
Southern Ontario is a big stamping ground for motorcyclists, but in the Province of Ontario, the oldest in the Dominion, the roads become primitive again, being very sandy and rough. The tourists will here take the ocean-going vessels for Great Britain, thus missing the quaint old provinces of New Brunswick and Nova Scotia, but even so they would encounter almost four thousand miles of "going" that would test the nerve and endurance of the hardest man living.

Last season a single tracker did manage by frequent recourse to "the rails" to traverse a portion of the Canadian Rockies into British Columbia, but none has, however, essayed to cross the wild portion of Northern Ontario in the east. Transportation in this section is mainly effected by canoe or boat on the many waterways. It is strange, however, that the motorcycle spirit has even extended to these Northern Ontario centers.

TWO BIG CANADIAN RUNS.

THE Toronto M. C., at a big meeting held Wednesday, August 14, decided to hold a reliability tour Saturday, Sunday and Monday, August 31, September 1 and 2, to St. Catharines, Ontario, Buffalo and Rochester, N. Y., making it an international event.

The Winnipeg M. C. will hold its annual endurance run on the same days. The route, about 300 miles long, will include the principal towns in the Province of Manitoba. J. M. Moorhouse, who won the trophy last year, will defend his title on this occasion.



August 23, Brockton, Mass.—Brockton Motorcycle Club, race meet; Marshfield fair grounds.

August 24, 25, Rockford, Ill.—Rockford Motorcycle Club, race meet.

August 24, Dover, N. H.—Race meet at Granite State Park.

August 25, Cleveland, Ohio.—Cleveland Motorcycle Club, race meet.

August 25, Decatur, Ill.—Decatur Motorcycle Club, race meet.

August 31, Reading, Pa.—Reading Motorcycle Club, race meet at Fair grounds.

August 31, September 1, Newark, N. J.—Fall 24-hour run of New Jersey Motorcycle Club.

September 2, Washington, D. C.—Building Trades Council meet, Bennings track.

September 2, Detroit, Mich.—Race meet under auspices of Detroit Wheelmen at State fair grounds.

September 2, Bradford, Pa.—Bradford Motorcycle Club, race meet.

September 2, Janesville, Wis.—Carpenters' Union race meet.

September 2, Circleville, Ohio.—Circleville Athletic Club's meet at Pickaway County track.

September 20, Union City, Ind.—Union City Motorcycle Club race meet at Greenville track.

RACE MEET IN FAR-AWAY CALGARY

THE people of Calgary were "honored" by the presence of Barney Oldfield on the 27th of July and the 10th of August. The first races were held at the race track, a half-mile oval, right near the centre of the town. There were about ten events, three of which were for motorcycles. About 10,000 people were there, and it is safe to say that about 9,000 went especially to see the motorcycle races, which were widely advertised. Through some misunderstanding between Barney's manager and F. W. Sanguine, who acted for the club, the race for singles was left out, so that there was only a 6l class, three heats, five miles each, and best two out of three. The entries were two Indian 7's, an Indian 4 and an old Excelsior 6. The Excelsior led the whole bunch a merry chase the first seven laps, losing on the straight stretches and gaining on the curves, the rider holding her open wide on every turn, which was more than any of the others dared to do. In the eighth lap the Excelsior rider let her down a little too low on the first curve and nearly fell twice, losing about 100 feet, and the result was: Sanguine (Indian), first; Danielson (Excelsior), second, and Woodward (Indian), third. The Indian four dropped out of the running. In the second and third races the Excelsior had engine trouble, the plugs fouling first, and then the points welding themselves together. The machine being old and worn, the rings were loose and the oil splashed up past them, thus fouling the back plug. Accordingly the Oldfield trophy went to Mr. Sanguine.

The straightaway races on August 10 were held about seven miles out of town on a private course, two miles in length. The motorcycles made the mile in 1:06, standing start, and the singles 1:14, standing start. The twin event was won by Sanguine on an Indian. Walker, on an N. S. U., had the misfortune to break his crank-case just before

the race, but he fixed it up as best he could and got two thirds. The single race was won by Trail on a machine of his own build, having for its power plant a 4 h. Peugeot motor. He had things his own way, coming in fully an eighth of a mile ahead. The races were viewed by about 2,000 people, or 400 auto loads.

Enthusiasm is aroused to a high pitch in Calgary, and races on Victoria race track will in future always bring out a large crowd. Oldfield's coming to Calgary was indirectly the cause of fifty-five arrests in two days in one trap in the east end of the city. Every one ponied up \$15 and costs and tried to look pleasant. Those who didn't try to look pleasant ponied up, anyway.

BRUNOT'S ISLAND MEET.

SPECTATORS at Brunot's Island track, Pittsburgh, Pa., on August 9, saw an excellent motorcycle meet in spite of a soft track. In the two-mile handicap, A. G. Schmidt, the Pittsburgh veteran, sustained a fall, but was only bruised. Markman, the winner of the first and second events, rode magnificently. The races were held in connection with the Grand Circuit horse races, an annual event in Western Pennsylvania. The summaries:

Two-mile handicap—John J. Markman (7 Indian), first; H. F. Payne (4 ported Indian), second; H. D. Griffith (Excelsior), third. Time, 2:25.
Five-mile handicap—Markman, first; A. G. Schmidt (4 ported Indian) (handicapped), second; Russell Giesey (7 Thor), third. Time, 5:44½.

INDIAN BESTS AEROPLANE.

PITTSBURGH, Pa.—On Saturday, August 17, William Lineweaver, of Lebanon, Pa., raced an aeroplane on a half mile track, for five miles. He rode a stock Indian single, and reeled off laps in 35 seconds, easily defeating the aeroplane, a sixty horsepower Curtiss, driven by McCally.

The Reason



The P E M has taken 16 "Firsts" in the 20 races it has run is shown in this little cut—Look at the points:

Overhead mechanical valves—giving accurate firing with high compression.

Gear Driven Bosch Magneto.

Positive Mechanical Oiler that never fails—The higher the speed—the more oil fed into engine.

Chain driven positive, sure and very fast. If you would be a winner—on the track or on the road—Ride a P E M.

Write for Booklet and our liberal rider agents' proposition.

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Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

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THE HAGSTROM MOTORCYCLE INNER LINER

Made of three-ply fabric, vulcanized perfect tire shape. Will not creep, pinch or chafe the inner tube.

PREVENTS PUNCTURES AND BLOWOUTS

DON'T ENVY a Smooth Running Motor. Use

HAGSTROM SPARK PLUGS

AND HAVE ONE

PRICE \$1.00

Official Plug of the Short Grass Motorcycle Club.
Regular equipment of INDIAN Motorcycles.

Write today for Prest - O - Lite Key and descriptive matter

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NEARLY NEW \$265, 4 1/2 h., magneto motor-cycle to trade for engine lathe. Bert Mackey, Laverne, Okla.

FOR SALE.—1910 Harley-Davidson 4 h., battery; used 3,500 miles. Machine in perfect running order, \$115 with tools and equipment. L. S. Gardner, Cortland, N. Y., R. D. 7.

FOR SALE.—1912 Harley-Davidson twin 7-8 h., chain transmission. Complete with Prest-o-Lite tank, luggage carrier and tandem attachment. \$200. J. H. Kyte, Fanwood, N. J.

REAL BARGAIN.—Absolutely brand new 4-cylinder Henderson, with tandem seat, \$260; ship anywhere C. O. D. subject to examination. Holmes Wright, 361 Washington st., Newark, N. J.

BRAND NEW HARLEY with clutch and spring seat post; used about 400 miles; \$190. 1910 magneto Excelsior; good condition; \$100. Magneto Flying Merkel, about 1910 model, tandem and lamp outfit, \$90. Indian battery, \$50. Excelsior twin, \$180. A. J. Henderlong, Crown Point, Ind.

MANUFACTURERS AND DEALERS.—Two new devices needed on motorcycles; nothing like them; no impracticable freaks. Particulars on request. J. C. Peden, Harrison, Ark.

FOR SALE.—Indian 7 h.; run about 160 miles; in good condition. All extras included. E. M. Kaitels, North East, Pa.

MOTORCYCLE TIRE BARGAINS!—A. C. C. A. prices talk! Diamond, Goodrich, G. & J. and other standard makes, guaranteed; Gridiron, Basket and Bailey Treads; 28 x 1 1/4, \$3.00; 28 x 2 1/4, \$5.70; 28 x 2, \$4.95; 28 x 2 1/2, \$6.20; 26 x 2 1/4, \$5.45; 26 x 2 1/2, \$6.20. Guaranteed. Tubes priced proportionately low. Shipped on approval. Don't buy until you receive our price list! The Automobile and Cycle Company of America, Dept. X, 1769-1787 Broadway, New York City.

FOR SALE.—1912 Flying Merkel 6, good order; Presto-O-Lite tank, lamp, horn, carrier, cyclometer and tools. Fast machine. \$200. Palmer, 233 South Second street, Duquesne, Pa.

FOR SALE.—1912 Harley-Davidson, 7 h. p., chain transmission, practically new, with speedometer, Prest-O-Lite lamp, luggage carrier, electric horn. Must sell account ill health. First \$250 cash takes it. Address S. B. Smith, 427 Cherokee street, South Bethlehem, Pa.

A RARE CHANCE.—Must be sold at once! Haverford, practically new, with full equipment. Bosch magneto, etc. Address at once, G. Weed, garage, cor. North Park and Washington streets, East Orange, N. J.

\$25.00 REWARD.—Lost, 1912 Harley-Davidson motorcycle single; magneto; motor No. 2.450B; Illinois license No. 3,342. Perfection headlight; Atlas tall-light; generator; Star tandem carrier and Barco exhaust whistle. Address, Russell H. Firkins, 1632 W. Madison st., Chicago, Ill.

REBUILT MOTORCYCLES.—Great clearance sale. Prices reduced way below cost. Goods must be moved quickly for cash. Machines taken in trade for new M-M's. Indians, Curtiss, M-M's, and many others; singles and twins. Many as good as new and ready for instant shipment. Rare opportunity to get high-grade mount for very small investment. Send today for Bulletin No. 61. American Motor Company, 716 Center st., Brockton, Mass.

HAVE CAPITAL TO INVEST: want active partnership in established paying motorcycle business, preferably New York or vicinity. Partner, 1570 Broadway.

CLEMENT MOTOR outfit, new, complete; sell for \$15 or exchange for anything useful. Mack, 273 44th street, Brooklyn, N. Y.

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A. C. C. A. PRICES TALK—Endless variety; latest models, every make; Indians, Merkels, Harleys, M. M.'s, hundreds others; \$20 up. Every machine guaranteed five years. Freight prepaid. Largest and only illustrated catalog published sent free. The Automobile and Cycle Company of America, Dept. I, 1769-1787 Broadway, New York City.

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For the Novice, the Amateur, the Experimenter and the Student.

THE brightest and most interesting "plain English" electrical monthly magazine published, nearly five years old. 112 to 144 pages monthly. New departments on aeronautics and "with the inventor."

THE AUTHORITY ON WIRELESS THE magazine to read if you want to keep up to date on wireless and progress in electricity. With one year's subscription to Modern Electrics for a limited time only we are making the following:—

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1 BLERHOT MODEL MONOPLANE —GUARANTEED TO FLY. FREE.

2 MARBLE'S POCKET SCREW DRIVER and Prest-O-Lite Key. Three sizes of blades locked in nickel plated handle which closes up like a knife. Closed 3 1/2 in. Open 5 1/2 in. Just out and it's a dandy. FREE.

3 DOUBLE MAGNETIC REVERSIBLE ENGINE WITH SPEED CONTACT LEVER 1000 to 2500 revolutions per minute. FREE.

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July 15, 1912.

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And oblige,
J. W. COLLAMER.

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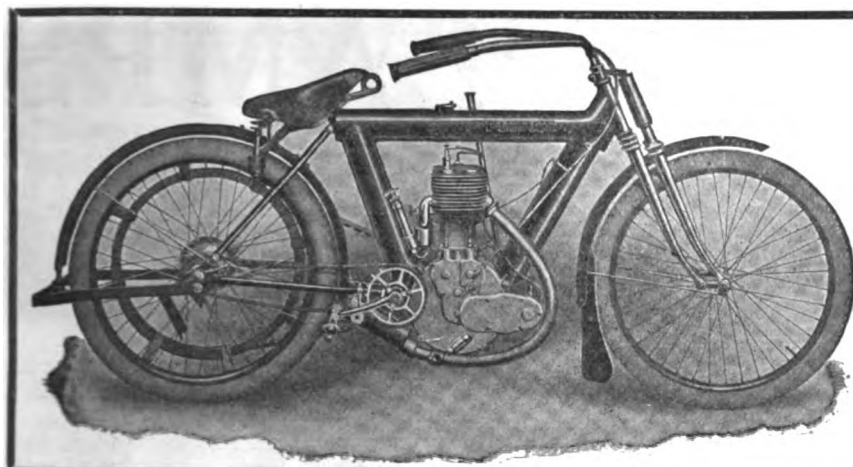
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MOTORCYCLES

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NIGHT LETTER.

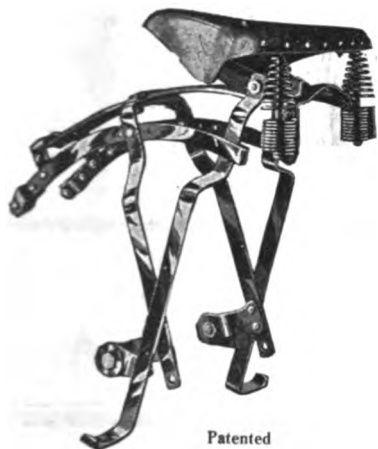
The Pierce Cycle Co., Seattle, Wash., Aug. 13, 1912.

Ed. Nelson on his 1912 Pierce Single and myself on E. A. Friend's Four Cylinder Pierce finished with perfect scores in Tacoma-Hoquiam Endurance Contest, August 11th, 1912. Distance, 204 miles. Rained most of the way and roads were in fierce condition. Fourteen machines entered, only 4 finished perfect, 2 being Pierce. Only these 2 Pierce machines entered. J. E. BUNKER.

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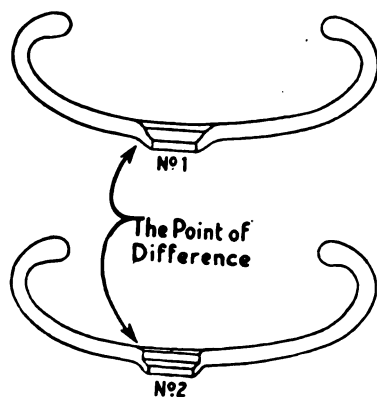
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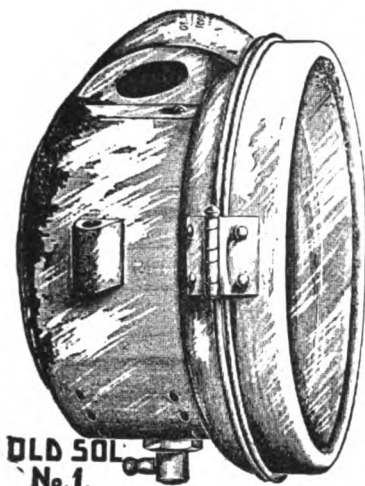
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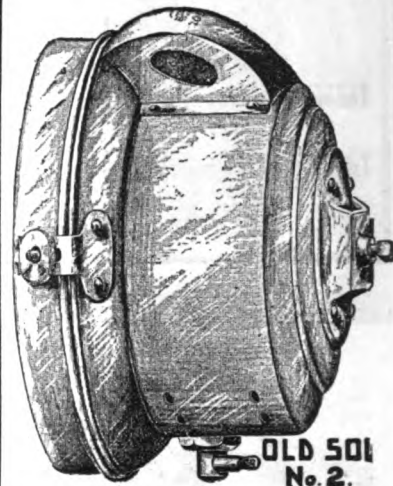
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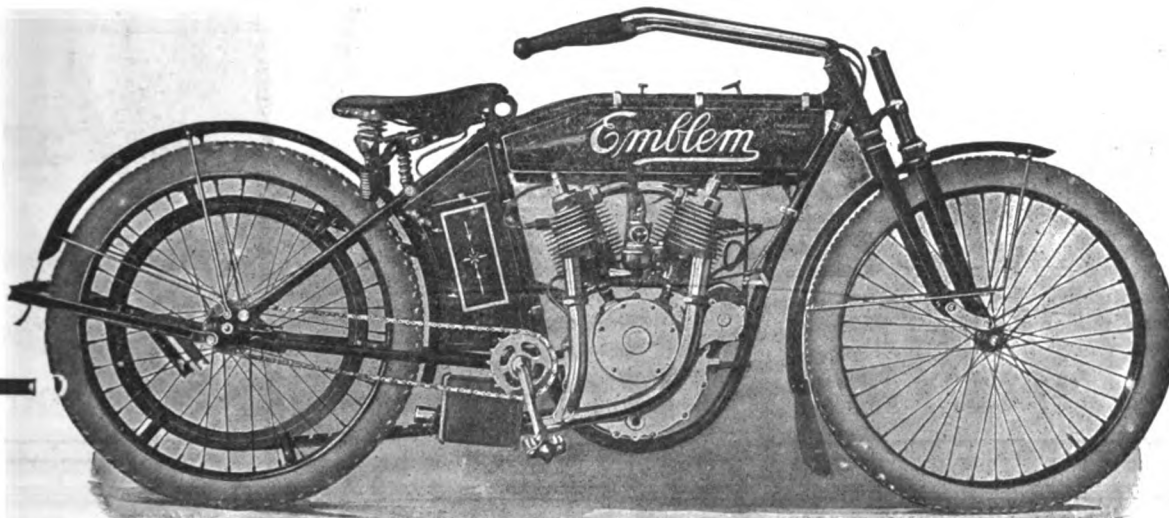
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you can depend upon getting "there" and "back" at the head of the bunch, whether they're singles or twins. Ask the North-eastern F. A. M. tourists. We're closing agencies right and left. Let us send you our catalog I.

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WRITE FOR IT

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A cycle that is chuck
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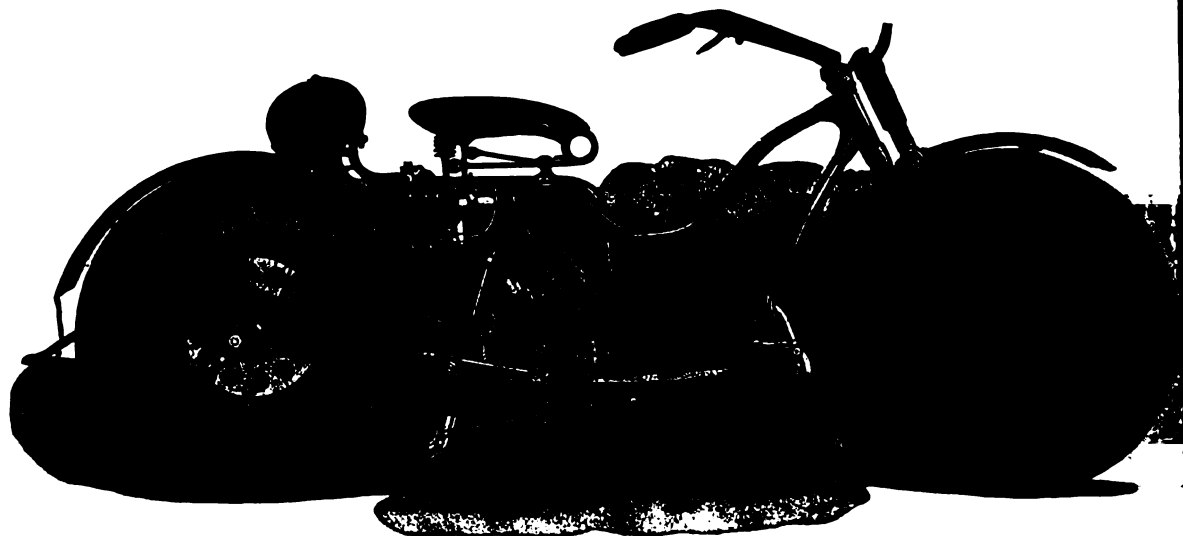
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A motorcycle that
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I We build machines for the man who requires all of these. Write for Agency proposition.

O For the man who is critical. For THE MAN WHO KNOWS.

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And it will give you the same service as it does to these satisfied users

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I am planning to take a Side-car over the roads to Columbus, Ohio, to attend the F. A. M. meeting, and I am looking forward to a very pleasant trip.

Yours very truly,

B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

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DEAR SIR:—Some time ago Waking & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

I am enclosing small photo of myself and lady friend taken in one of our city parks. You may keep this photo or tack it on a fence, or you can use it in your advertising.

I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

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Yours truly,

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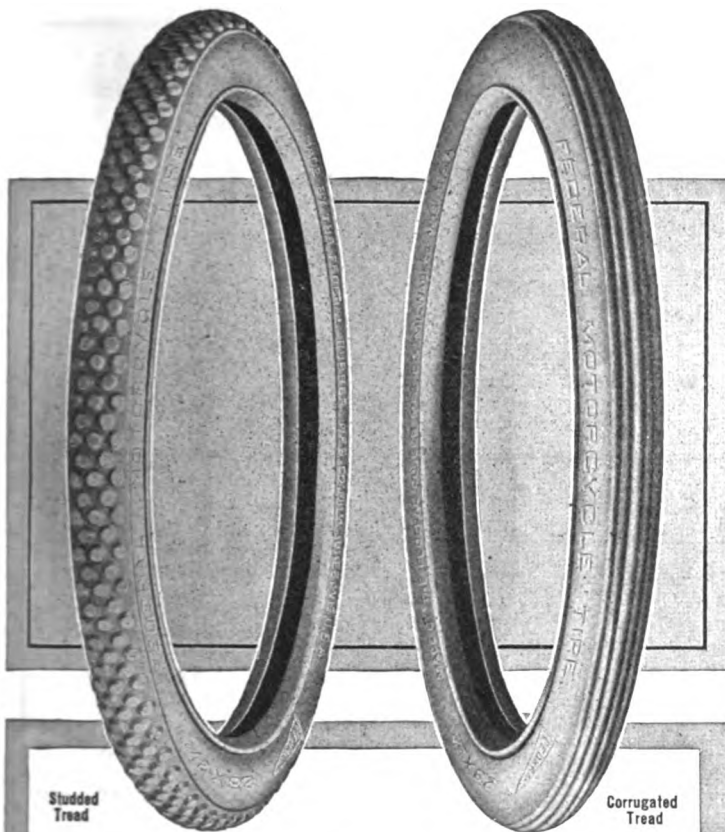
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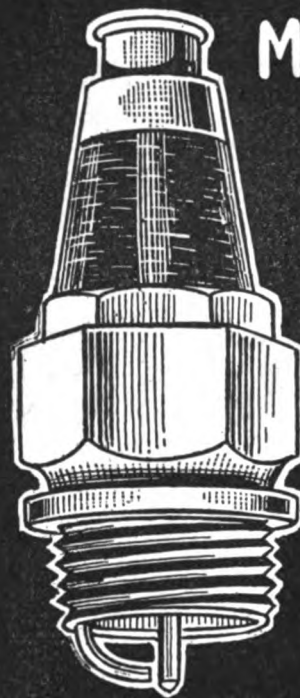
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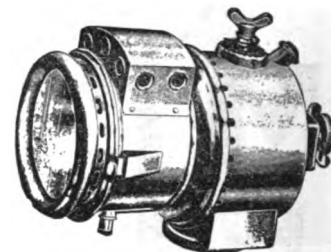
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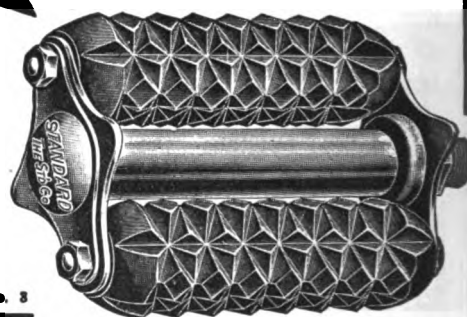
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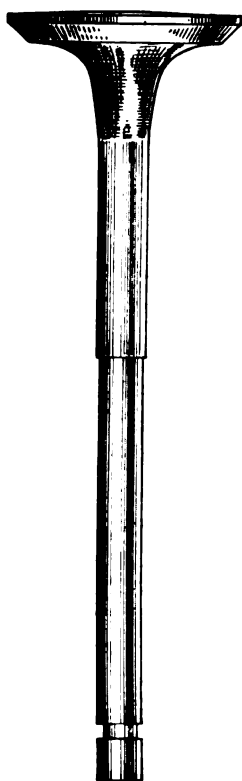
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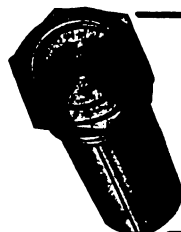
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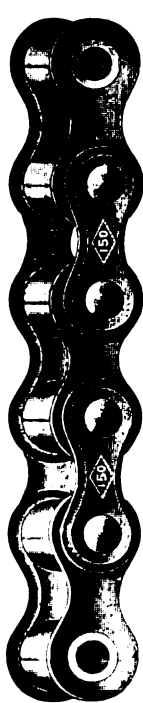
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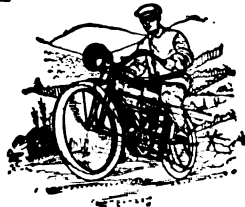


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FOR MOTORCYCLES



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To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

ROSE MANUFACTURING COMPANY

933 Arch Street, Philadelphia, U. S. A.

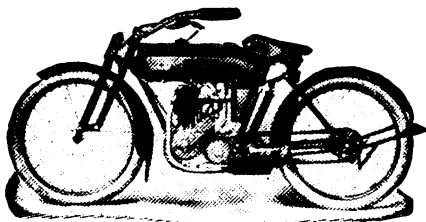
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A few weeks ago we issued a challenge to motorcledom in general. We offered to pit one of our stock machines against a stock machine of any other make in *any kind of a test*—endurance, speed, hill-climbing power—*anything*. There have been no takers. *Why?* Isn't that significant of something? What do *you* think?



READING STANDARD COMPANY, 306-340 Water St., Reading, Pa.

Consider Two Points of the 2-Speed Minneapolis Big 5



Absolute Dependability
and

11½ h.p. when needed

Postal brings description
of this and also

10 H.P. TWIN MODEL

THE MINNEAPOLIS MOTORCYCLE CO. MINNEAPOLIS, MINN.

PURDY WHISTLE

"THE WARNING SUPREME"

Lever or Handle
Bar Control

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TEN THOUSAND RIDERS READ THE MART

Our Classified Advertising Page
THREE CENTS A WORD

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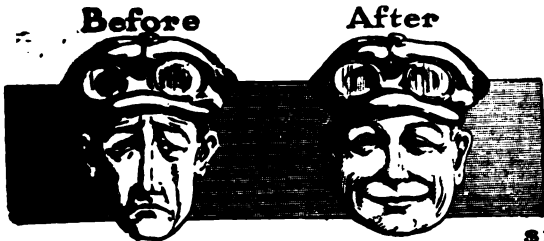
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**J-D Visible
Cured
This Man**

DIAGNOSIS—Ignition Trouble

PRESCRIPTION—One set J-D Visible Spark Plugs

FEE—\$1.00 per plug—money back if not absolutely satisfied

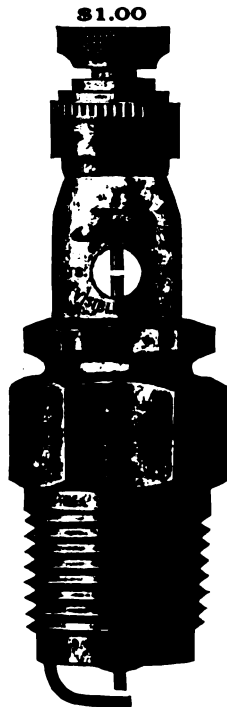
We can cure your ignition troubles, too. The new principle embodied in the J-D VISIBLE CURED SPARK PLUG enables you to locate and cure ignition trouble at a single glance.

One look tells everything

Through the port in the porcelain—outside the plug—you see if the spark is jumping the gap in the central electrode. If the spark jumps, the proper ignition fails to follow, then the plug must be foul or the carburetion faulty. If the spark does not jump, then trouble lies behind in magneto or wiring or coil or batteries. A slotted adjusting nut allows you to widen or close gap. Opened, it intensifies spark and closes point automatically. Uses minimum current, makes timing of engine easy, and permits retarding of spark in any cylinder.

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Clothes that fit well always look well and wear well.

When you

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AURORA**

MOTORCYCLE  **CLOTHING**
BRAND

you buy clothing with

**Strength in Every Fibre
Quality in Every Thread**

These motorcycle suits are cut to give a perfect fit, plus plenty of style and comfort. For service they are unequaled.

They're the choice of the tourists and endurance riders.

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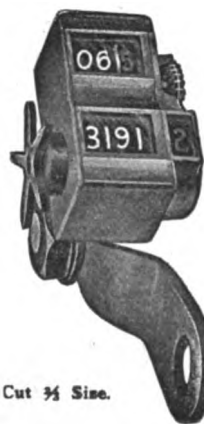
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Veeder

**Specially constructed to withstand hard
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It adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.



Cut 3/4 Size.

Easily adjusted to any motorcycle.
Made for 24, 26, 28 and 30-in. wheels.

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Price complete with
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CELEBRATED MOTORCYCLE PEDALS

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THE STERLING.
Embossed handle, trade mark in gold.
18 ins. long, 3/4 in. dia.



THE RELIABLE.
Embossed handle, 18 ins. long x 3/4 in. dia.

Far superior to brass pumps in every respect.
Handsome, Indestructible, Perfect. Order
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Steepest Track in the World

Races held on Wednesday, Saturday and
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Record-breaking attendances

Every possible courtesy and consideration shown
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DANGER!

Clear the Road!

The quick backward glance and the instant response
to this warning testifies to the undoubted efficiency
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Acme Siren

the little horn with the enormous range. The demand
for the Acme is enormous, but our manufacturing fa-
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**WOULD YOU PAY \$1.00
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delays, difficulties and expense resulting from these misfortunes?

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(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

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Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

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We are just conceited enough to claim that in the Auburn you will find the

*Most Efficient, Durable and Lasting
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**An Exhaust Horn with a Musical Tone
Warns Without Giving Offense
A Hair-Raiser When Needed**

There is absolutely nothing about Trinity Chimes to get out of order—no batteries or wire connections—and it never fails. It costs nothing to operate. It has four tones giving a perfectly-blended chord of pleasing harmony. Its warning always attracts attention.

It is an ornament to any machine. It sets up close to the three-way valve, which can be operated by either the foot or the hand. When the valve is released it automatically comes back into position for free exhaust.

Get the best horn at the lowest price.

Every motorcyclist should have his motorcycle equipped with a Trinity Chimes.

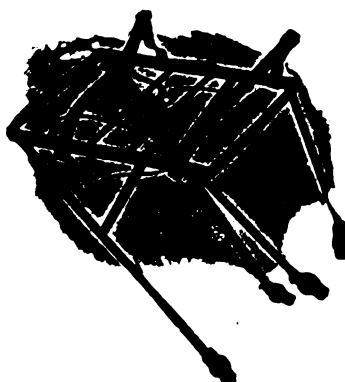
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THE "STAR" LUGGAGE CARRIER \$3.50

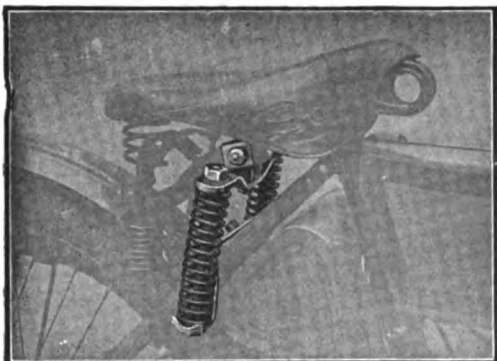
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Make every ride a pleasure ride.

The last word in shock absorbers.

An absolute necessity for real comfort.

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Delivers a larger volume of properly mixed gas than any other motorcycle carbureter in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

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All air ports have been enlarged.

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GET WHIPPLE'S NEW "DATED" SECOND HAND LIST

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WHIPPLE MOTORCYCLE BUILDING
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Barco Motorcycle Chimes

The illustration shows the extreme simplicity and compactness of the New Barco Motorcycle Chime, and the ease with which it is attached to the machine.

The chime has three clear loud tones (copied after the Barco Automobile Chimes). The outfit is easy to operate and is made to fit any machine.

NO PARTS TO SHAKE LOOSE.

Order from your dealer or direct from us.

Send for catalogue and full directions.

BARCO BRASS & JOINT CO.

230 N. Jefferson St.

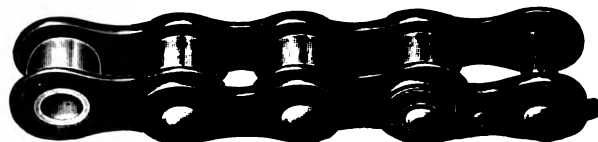
CHICAGO, ILL.



WHITNEY

Motorcycle Chains

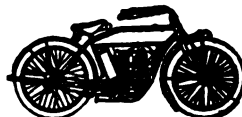
are strong, accurate and durable. They are rapidly gaining popularity. Made right from the right kind of material by specialists, in a factory especially equipped for the making, and backed by years of experience.



When making replacements insist on a "Whitney" and get acquainted with its merits.

*"Whitney" Chains
are built for strains*

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AT 1/4 to 1/3 THE PRICE WHEN NEW

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In night riding you do not need to see the trees at the side of the road. It is necessary only to see the road and as far ahead as possible. Most lamps, by the diffusion of the rays to the sides project the light for only a short distance in front.

20TH CENTURY LAMPS

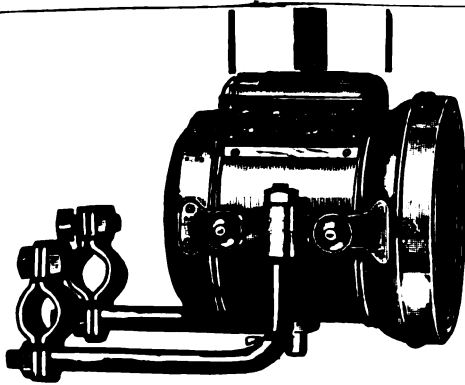
Throw the light just where it is most needed to avoid danger—directly ahead and for a long distance.

WHY TRUST YOUR SAFETY TO ANY OTHER LAMPS?

20th Century are the best and most practically constructed lamps built. A 20-years' reputation is behind them.

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For Your
Motorcycle
use a

HEITGER Carburetor

PERFECT CONTROL
From 1 to 100 Miles

More Speed
More Satisfaction
More Economy

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SIMPLEX SIDE CARS

Simplicity Strength Satisfaction

Note the strong, simple lines of the SIMPLEX FRAME, the long, flexible springs, the prominent offset axles and the rear extension for trunk rack or luggage carrier.

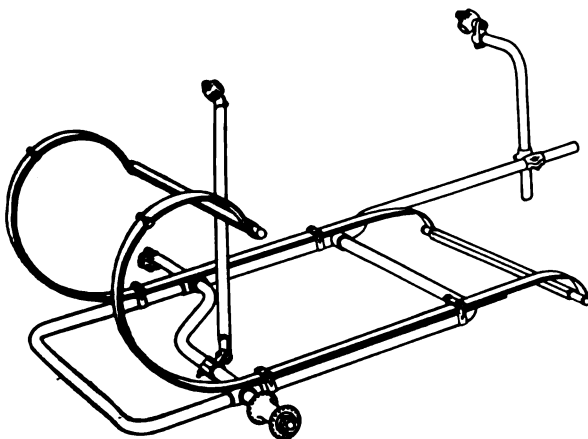
Then Consider the further advantages of our All-Steel Body, with high protecting dash and floating mudguard; our special lock fittings and our detachable hub spindle.

We have taken advantage of our experience in providing these exclusive and practical features. Our enthusiastic customers are our best advertisement, for the Simplex Side Car is all-satisfying. Catalog for the asking.

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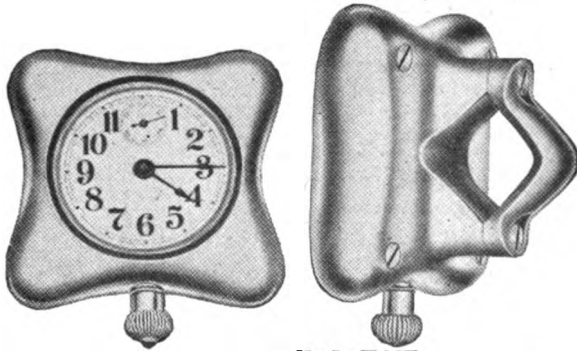
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Brooklyn, N. Y.

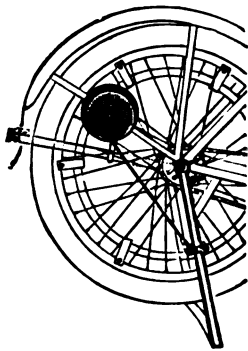


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Motorcycle Supplies



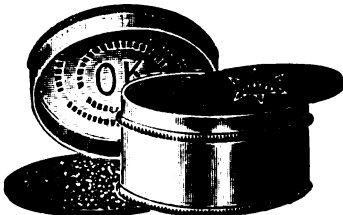
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movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$3.50.



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avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
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should be used on all exposed engines where water is likely to come in contact with plug and cause short circuit.
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contains 10 Ready-to-Use Patches, which require no cement. Patches are 1 1/2 inch—just right for punctures. Contained in air tight brass box moisture and rust proof.
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O. K. JUNIOR TIRE TALC.
Handsome lithographed sifter top metal can, with friction bottom, which can be opened when empty for refilling. Measures 1 1/2 by 5 inches. Best quality talc. Highest grade package for purpose ever put out.
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High Grade. Finely nickel plated.
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Save One-Quarter

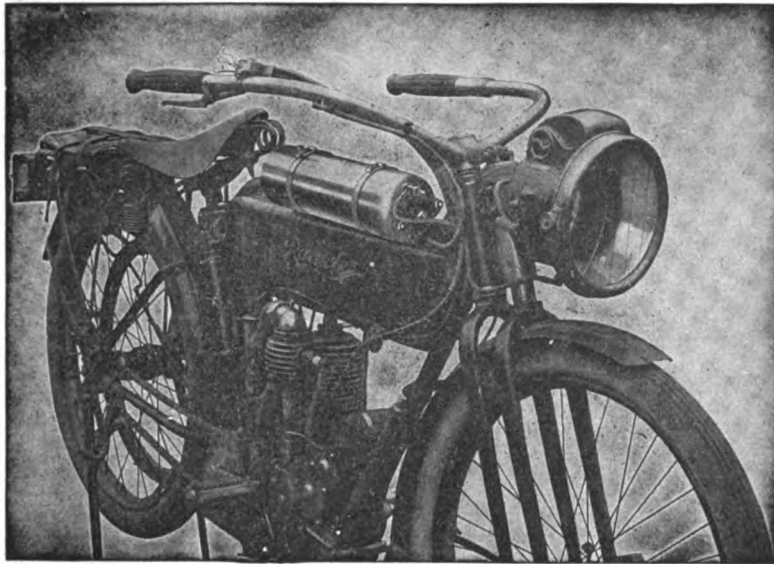
the purchase price of motorcycle accessories and parts. We sell guaranteed goods twenty-five per cent cheaper than any other house

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JUNIOR CARBO-LIGHT TANKS

**FITTED ON
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MOTORCYCLE
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POSITION**



**THOUSANDS
IN USE
UNIVERSAL
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Beautifully nickeled tank, 4 x 12 inches. User recharges it himself at cost of ten cents for 25 hours of white clear flame. Write for booklet and find out what users say about the CARBO-LIGHTS. Dealers' offer.

CARBO-LIGHT CO. - - ANDERSON, IND.

A REVOLUTION IN MOTORCYCLE MOTOR DESIGN

In bringing out our DE LUXE line of motorcycle motors, we have introduced a large number of improvements, and offer these motors as the most advanced now before the trade.

NOTEWORTHY IMPROVEMENTS.

One piece crank shaft.	Simplified design throughout.
One part crank case with cover.	Reduced number of parts.
Improved cam and magneto drive.	Quiet running motor.
Oil tight motor.	Large Ball Bearings mounted in
Large Valves.	steel lined pockets.

Equipped with Bosch Magneto.

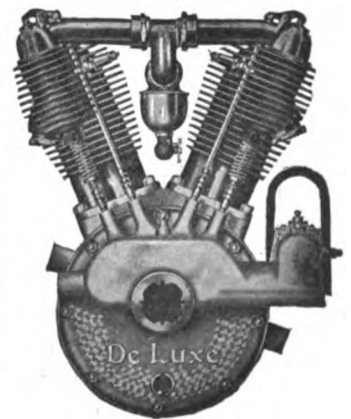
These improvements in design, together with the high grade materials used in construction, the modern methods of manufacturing applied, and the remarkable performance of these motors in road tests mark a revolution in motorcycle motor building.

FOUR SIZES

Four H. P. Single Cylinder	Five H. P. Single Cylinder
Seven H. P. Twin Cylinder	Nine H. P. Twin Special

PLAIN OR TWO SPEED MODELS. IMMEDIATE DELIVERY.
CONTRACTS SOLICITED.

PATENTS PENDING.



The F. W. Spacke Machine Co.
INDIANAPOLIS, IND., U. S. A.

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WE'RE going to stop hiding our light under a bushel. We're going to come forth boldly and proclaim the indisputable fact that we are the largest manufacturers of belting in the world—we make more and better belts than any other manufacturer—we tan more skins under the long time process than any other manufacturer—and we have no hesitancy in saying that it is due to our powerful organization and the legions of highly specialized workmen we employ that we are able to handle promptly the enormous demand for the



Belts, which for non-stretching—non-slipping—flexible—efficient power have yet to be equalled. Go to your dealer and ask him to show you a belt. He'll show you the SPARTAN.

THE GRATON & KNIGHT MFG. CO.
Franklin and Norfolk Streets WORCESTER, MASS.

BRANCHES:

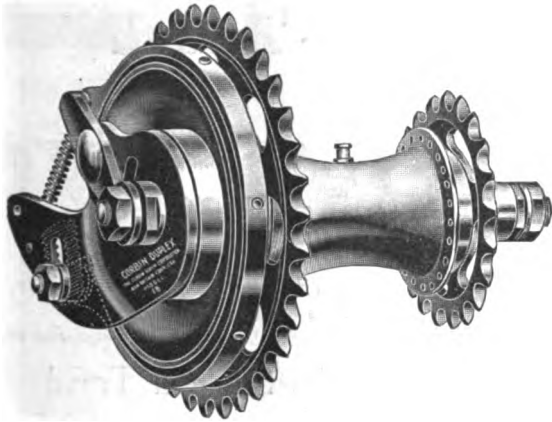
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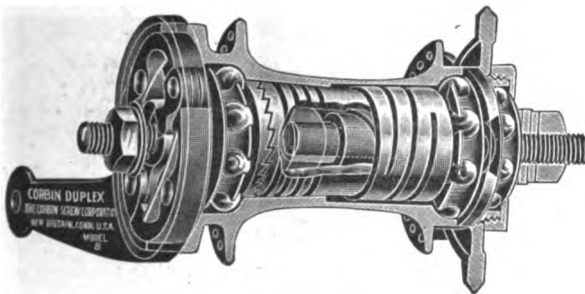
JOBBER AND DEALERS—PLEASE NOTE:

Over 75% of all the motorcycles at the F. A. M. meet at Columbus, Ohio, were equipped with the



Corbin Duplex Motorcycle Brake

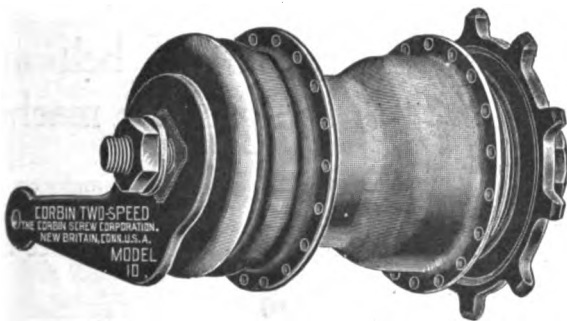
This Brake is the choice of both the motorcycle manufacturer and the experienced rider who know the advantages of Corbin construction and reliability.



Corbin Duplex Coaster Brake—Sectional View.

Corbin Bicycle Coaster Brakes

The Corbin Duplex Coaster Brake combines the free wheel feature and the foot brake action. Operated instantly by a slight pressure of the foot. Strong, compact, simple, reliable. The best designed and most popular brake on the market.



Corbin Two-Speed Coaster Brake—Exterior View.

The Corbin Two-Speed Coaster Brake, an exclusive Corbin production, decreases the labor of riding up steep hills and against strong winds. No levers or wires are used. Operated entirely by the foot. Same free wheel and braking action as the Duplex.

Any bicycle repair shop can fit any of these brakes to the rear wheel of your machine.

All Wise Dealers Stock Corbin Brakes

Write for free catalog showing all models

The Corbin Screw Corporation

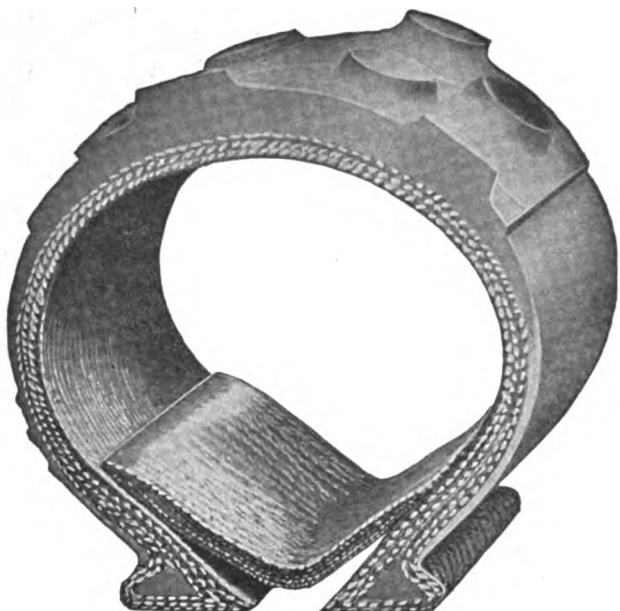
**NEW BRITAIN
CONNECTICUT**

Division of the American Hardware Corporation

(Licensed Coaster Brake Manufacturers)

Western Office: 65 West Lake Street, Chicago

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CONTINENTAL- ERIE Motorcycle Tires

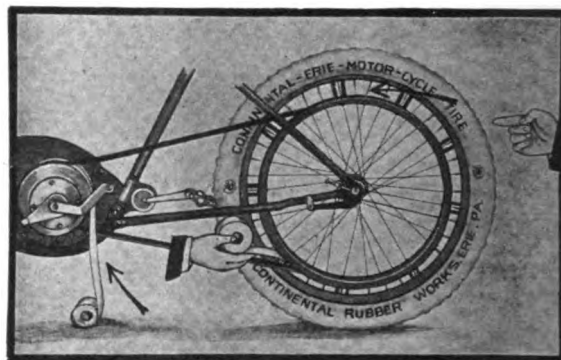
White Studded Tread

Are Built for Service

Continental-Erie Tires are made of the very best grade of Sea Island Fabric, Highest grade of Friction and have an especially Tough and Resilient Tread.

Continental-Erie Tires are made only by Tire Makers of long experience.

Specify Continental-Erie Motorcycle Tires when ordering your next machine.



TRADE
Non-Slip-Lag

MARK

No More Torn Belts

Doubles the life of the belt and adds
25% to the life of the machine

NON-SLAP-LAG is the new lining for pulleys. It absolutely prevents belts from tearing and slipping; increases their life and affords additional power. Non-Slip-Lag can be applied without removing Belt or Pulleys. No Screws or Metal Parts are required to hold Lag on Pulley. Non-Slip Lag is now being used exclusively by the Eclipse Machine Co., on the Eclipse Free Engine Pulley.

About Continental-Erie Goods
Ask Your Jobber—He Knows

DEPT. T

CONTINENTAL RUBBER WORKS, Erie, Pa.

New York Branch, 35 Murray St.

Chicago Branch, 131 N. Canal St.

Cleveland Branch, 1551 Columbus Road, N. W.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per

day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4.....\$5.50	28 x 2 1/4.....\$6.50	28 x 3.....7.25
26 x 2 1/2.....6.00	28 x 2 1/2.....6.75	29 x 3.....7.50
	28 x 2 3/4.....7.00	

Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. BRICTSON, President
The Bricton Mfg. Co.

2592 Bricton Building
Brookings, South Dakota

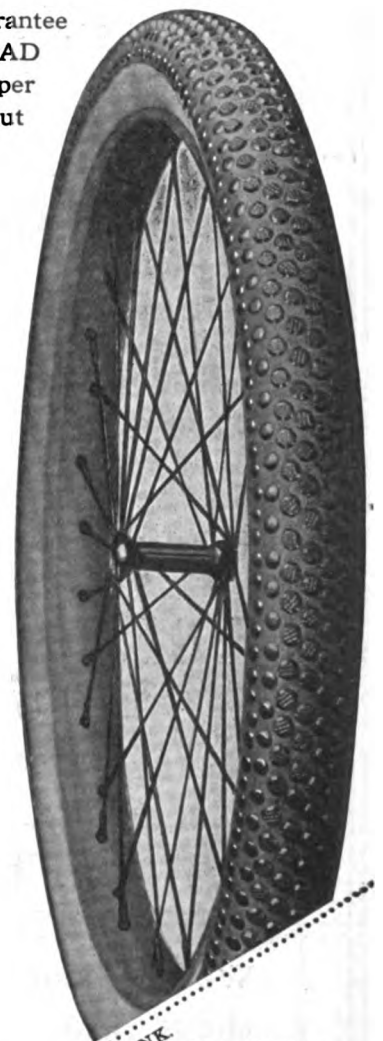
O. A. Bricton,
President,
The Bricton Mfg. Co.,
2592 Bricton Bldg.,
Brookings, So. Dak.
Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

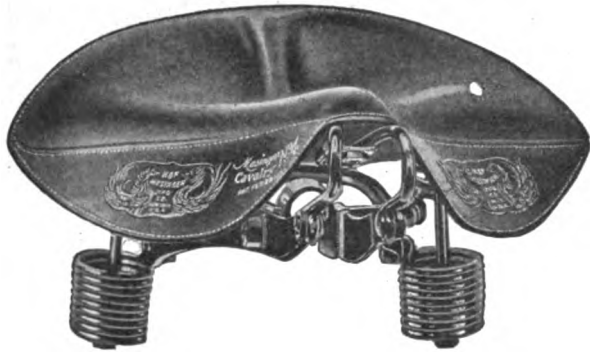
Name.....
City..... State.....
County.....

DEALER'S COUPON.

O. A. Bricton,
President,
The Bricton Mfg. Co.,
2592 Bricton Bldg.,
Brookings, So. Dak.
Enclosed please find.....
in the sum of \$.....for which
ship by ex. or fgt.....(quantity).....Bricton
Motorcycle Treads, size.....with the understanding if they
are not perfectly satisfactory I may return them within 10 days
from receipt of shipment and you will refund my money.
Signed.....

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.





MESINGER CAVALRY No. 4, with open front, for lowest saddle position.

THE OLD

Just as our saddles are superior to any other saddle made, so will the new

Mesinger Saddle

be superior to the one which is now giving such perfect satisfaction. We confidently predict that the 1913 rider will be "super-satisfied" with the new Mesinger. Watch for it.

H. & F. Mesinger Mfg. Co.
1801-1807 First Ave.
NEW YORK

AND THE NEW

We are not yet ready to show our new Mesinger Motorcycle Saddle. When we do you will cheerfully admit it was well worth waiting for.

WEED ANTI-SKID CHAINS FOR MOTORCYCLES

give perfect traction, prevent skidding and slipping.

Mud, deep sand, slippery pavement or snow will not spoil your pleasure if your tires are equipped with Weed Chains—They make all roads good roads.

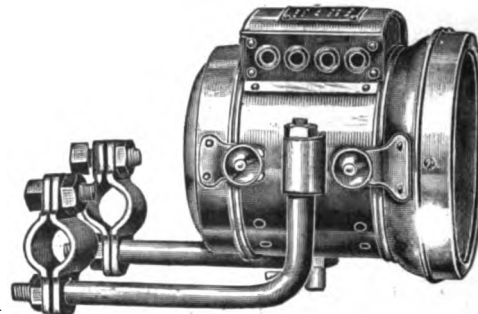
Easily carried; they can be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer
or write us for full particulars.

WEED CHAIN TIRE GRIP CO.

28 MOORE STREET

NEW YORK



SEARCHLIGHT No. 108, showing back closed.

Don't Forget

to say "20th Century" when ordering lamps.

It is the synonym for lighting excellence. Users will tell you they are the "Old Reliable" lamps.

Catalogue sent cheerfully

20TH CENTURY MFG. CO., 420-422 Ogden St., Newark, N. J.

**We Pay
Good Commission
to
SUBSCRIPTION AGENTS**

WRITE US

MOTORCYCLE ILLUSTRATED

51 Chambers Street

New York

THE KANSAS SHORT GRASS TOUR IS OVER

THE SEVEREST TEST ON RIDER AND MACHINE EVER HELD IS ENDED

¶ Read the three motorcycle papers. They tell in words of one syllable the obstacles encountered on this tour—impassable roads, swollen streams and oceans of mud. Who of the riders surmounted these obstacles and finished with a perfect score?

¶ Six Yale riders started and six Yale riders finished on time at Garden City the 26th, making a perfect score.

¶ The machines are in good order, just as they started out. We leave it to your good judgment, Mr. Dealer and Mr. Rider, if a more severe test could be made to prove absolute reliability. A performance of this nature is the best proof we can offer of Yale dependability.

INVESTIGATE THE YALE—KNOW CONSOLIDATED SERVICE
Singles and Twins Battery and Magneto Belt and Chain Drive IMMEDIATE DELIVERY

The Consolidated Manufacturing Co.

1730 FERNWOOD AVENUE, TOLEDO, OHIO

F. D. CORNISH, Eastern Representative, 219 Clinton Ave., Newark, N. J.

WE ALSO MAKE YALE AND SNELL BICYCLES, HUSSEY HANDLE BARS AND DROP FORGINGS OF EVERY DESCRIPTION

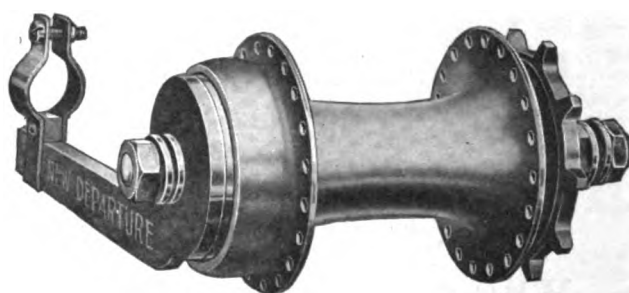
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NEW DEPARTURE

Motorcycle Specialties

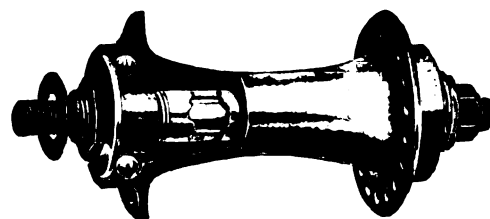
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and giving maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen $\frac{1}{4}$ -inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



Write Today for Literature

THE NEW DEPARTURE MFG. CO., Bristol, Conn.

COASTER BRAKE LICENSORS

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED

Excelsior Single

4 H. P., Eclipse Clutch Equipped, battery model, at

\$175

It's a Live Proposition for Dealers

The Excelsior single, 4 h. p., Eclipse clutch equipped, battery model, at the price offered will sell like wild-fire—if you, Mr. Dealer, will but tell your customers of the exceptional bargain.

Now is the Time to Get Action

For the beginner—a better, a more reliable, an easier-to-handle machine is not to be had. And it's just the season when everyone has money and can afford a motorcycle.

Immediate Deliveries

The factory output is now about 80 machines a day, and we can make instant deliveries on this, as well as any other of the Excelsior models.

Better Write Today for the Full
Details of This Wonderful Offer

EXCELSIOR MOTOR, MFG. & SUPPLY CO.

2201-2259 Union St., Chicago, Ill.

Jeffery-Dewitt Porcelain Triumphs Again

¶ It takes a hammer to crack a J-D Porcelain. Heat can't do it. Every claim to the superiority of this product has been vindicated—and more—by a new experience. A great motor car factory burned to the ground on the first day of last June. It was the fiercest conflagration ever recorded in the automobile industry. Heavy brick walls crumbled like cardboard; steel rails



twisted and curled like glowing serpents along the ground; immense steel girders bent and writhed in the flame; piles of aluminum castings melted into a white hot pool. When the fire had burned itself out, nothing remained but the smoking wreckage of a plant and stock worth half a million.

¶ Workmen started in to sort out the junk. Twenty-seven cars ready for shipment had been standing on one of the floors. Their scarred skeletons were found deep in the wreckage, where the flames had been hottest.

¶ Every motor had been equipped with J-D Spark Plugs. Not a single Porcelain was cracked!

¶ The case-hardened steel of the plugs had no more temper left in it than a piece of putty. The brass caps were melted off. But not a porcelain had suffered a bit of damage, beyond having the enameled lettering half burned away, as is shown in the photograph.

¶ This same quality of porcelain enters into every spark plug produced by the Jeffery-Dewitt Company. When you buy spark plugs again buy the best—the J-D line—the kind that defy heat, besides being carbon proof, soot proof, oil proof. Satisfaction guaranteed or your money back.

¶ Write for our motorists' classic: "Ignition and Spark Plug Talk." It's full of good pointers and timely information. A new edition is just off the press.

JEFFERY-DEWITT COMPANY
55 Butler Avenue Detroit, Michigan
Largest Manufacturers of Spark Plugs in the World

The Motorcycle MANUAL

Is the last word on the subject of a publication giving comprehensively and in a handy form all the information required by a motorcycle rider or dealer. 104 pages, printed on coated paper.

Motorcycle engine and frame parts illustrated and fully described—their functions fully explained, with a remedy for every possible trouble

YOU NEED THIS BOOK

For it also tells you how to tour; gives the motorcycle laws of every state; official racing records, hill climbing, horsepower and other formulae, and a complete directory of the motorcycle trade. Pages are magazine size, 7 x 9 inches.

Paper covers, 25 cents, postpaid. Cloth bound, 50 cents, postpaid. Special prices on lots of 10 or more.

For \$1.25, we will send you a copy of the Motorcycle Manual and also enter your subscription to Motorcycle Illustrated for one year.

MOTORCYCLE ILLUSTRATED, 51 Chambers Street NEW YORK

Another new model—

a model that is described with every truth as "the Pullman of saddles."

Such is the

BROOKS B 401

—the saddle which meets the needs of the present-day motorcyclist better than any other saddle can.

Being anatomically shaped, you sit IN it rather than ON it, and the fact that the BROOKS, the original and only genuine Compound Springs, are placed under the weight-carrying portion of the seat, and that the latter is not hinged at any fixed point at the peak, ensures that every movement of those springs will be in a true vertical direction.

That means even greater comfort—luxury, in fact—and if that's your desire you should have it fitted to your present mount.

J. B. BROOKS & CO., Ltd.

75 Criterion Works, Birmingham, Eng.

Distributing Agents for U. S. A.

The D. P. Harris Hardware Co., 48 Warren Street, New York



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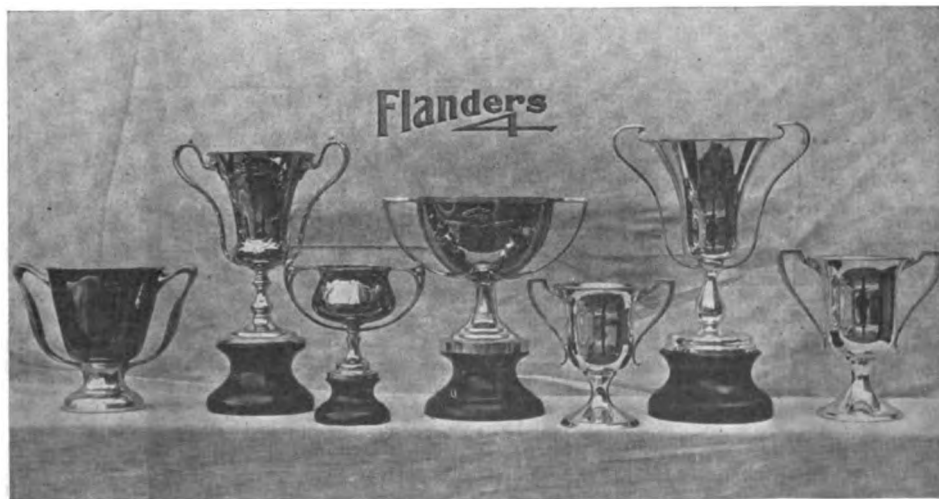
WE DON'T MAKE Racing Machines BUT—

FLANDERS MFG. CO.,
Pontiac, Mich.

Flint, Mich.,
August 18, 1912.

Flanders four only touched the high spots here today.
Two firsts, three seconds, two thirds against large field.
Seven prizes out of four events. No accident, and not
a single stop by a Flanders during a race.

SWEGLES.



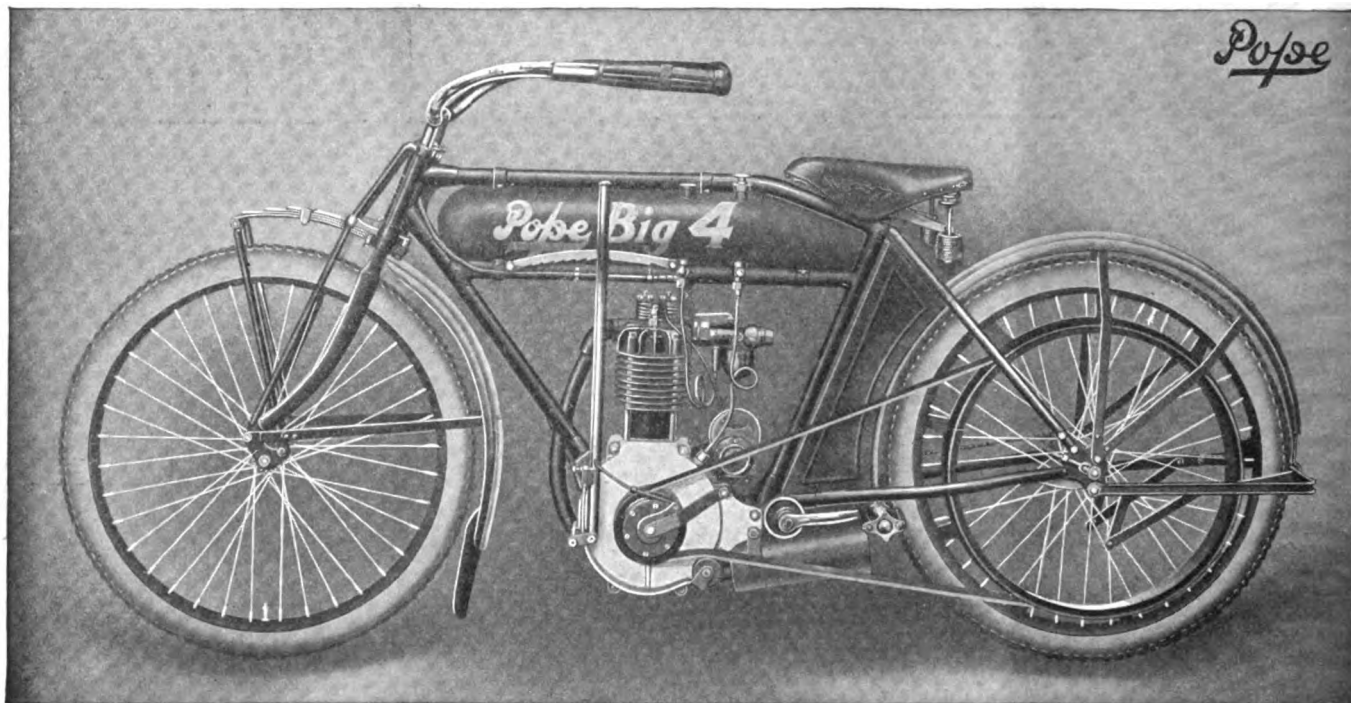
FLANDERS MANUFACTURING CO.
PONTIAC, MICHIGAN

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POPE "BIG 4"

\$200

Overhead Valves
With Magneto Equipment
Free Engine Clutch
and Idler



DEALERS CANNOT SPEAK TOO HIGHLY OF MODEL K--NEW POPE "BIG 4"

ALL that we have claimed for the POPE "BIG 4" is enthusiastically backed up by dealers in various parts of the country who have already given the new machine a thorough tryout. When reading the testimonials printed below, remember this—that they are the frank, unbiased opinions of practical business men like yourself, fully posted on what the purchaser wants and has a right to expect in an up-to-date motorcycle of the Model K type.

"The Model K machine has been received. It is there every way and a wonderful improvement over all single-cylinder machines now on the market that I have seen."

"The writer had the opportunity a few days ago of trying this model out and must say that it worked fine. I rode it for 180 miles on Monday and never had one miss. It has certainly got them all guessing on account of its quiet running, and we have named it the 'SILENT POPE.'"

"Your Model K arrived O. K. and I admired its lines and performances. It is certainly a wonder and an ideal machine for the road."

"SOLD IT WITHIN TWO HOURS AFTER UNCRATING IT."

"We received the Model K, O. K. and think it is going to be a GOOD SELLER. In regard to the order for the two Model K's we wish to reinstate same."

Pope Model H—The Pioneer Lightweight

\$165 With Magneto Equipment

The best motorcycle of its type on the market. For economy in first cost, upkeep and operation, it is in a class by itself. Has plenty of power for every practical purpose of hill-climbing and all-round road work.

MOTORCYCLE DEALERS ATTENTION!!!

The Pope Line offers the greatest selling proposition to dealers for 1913. Another model will be announced soon. We want dealers in every locality where we are not now represented. Write today before it is too late. Send for our motorcycle catalog. It's a beauty.

The Pope Manufacturing Company, Hartford, Conn.

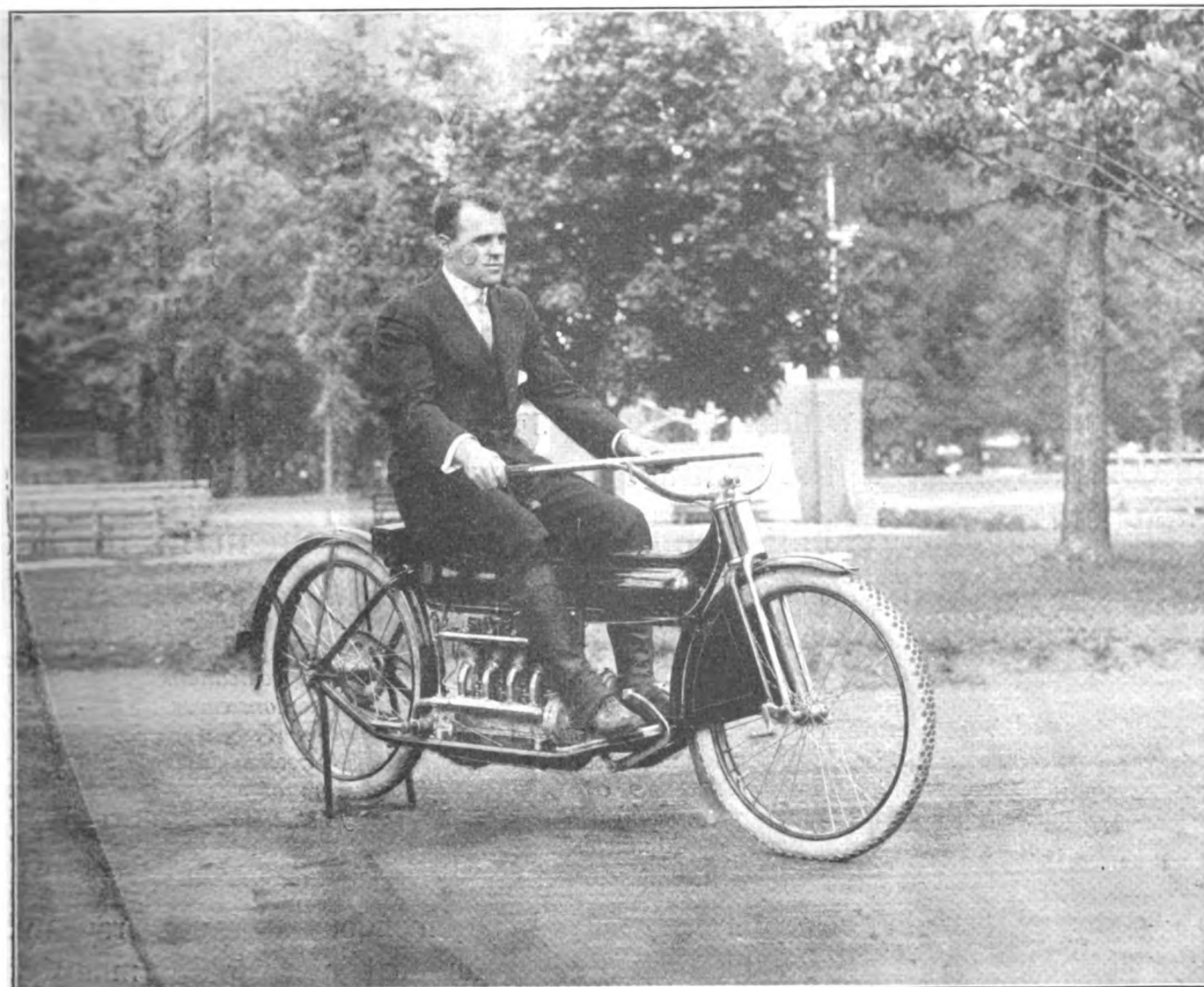
PACIFIC COAST DISTRIBUTORS

F. P. KEENAN & CO., Portland, Ore.,
Northwest.

KIMBALL-UPSON CO., Sacramento,
Northern California and Nevada.

C. L. SMITH, Los Angeles,
Southern California.

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THE HENDERSON, 4 Cylinders, 7 H. P., Free Engine, Starting Crank, \$325

HENDERSON MOTOR CYCLE

The popularity of the Henderson sweeps on and on.

More and more men discover, every day, that they are no longer compelled to put up with noise and vibration and jerky power.

They are turning to the Henderson—because it is the one practical machine that offers freedom from every objection that has been raised against the ordinary twin and single cylinder productions.

Whether you are a rider or a dealer, you will find it to your interest to get in touch with us.

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Ave., Detroit, Mich.

BURNSIDE & CALDWELL, distributors for California, 442 Van Ness Ave., San Francisco, Cal.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubos, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

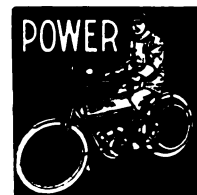
OFFICES IN

NEW YORK

CHICAGO

DETROIT

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THE Key to Motorcycle Comfort is the shock-absorbing spring frame and spring forks of

THE FLYING MERKEL

which minimize vibration, jolts, jars, etc., so that they are scarcely felt. The rear wheel has a vertical play of four inches without change of saddle position. This means that the rider of the "Flying Merkel" doesn't have to depend upon his knees to act as shock absorbers. Comfort—power—reliability! The maximum of each can be found only in the "World's Most Comfortable Motorcycle."

SEND FOR CATALOG "B"



California Distributors The Appeal Mfg. & Jobbing Co., Los Angeles.
Oregon & Western Washington West Coast Supply Co., Portland, Ore.
Eastern Washington, Idaho & Montana Spokane Cycle & Supply Co., Spokane, Wash.
Colorado & Wyoming C. W. Brown, Denver, Colo.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Make your motorcycle a 24 hour servant

Dare you ride your machine any time and place you please? Or does nightfall catch you worried and anxious, creeping along in fear and trembling?

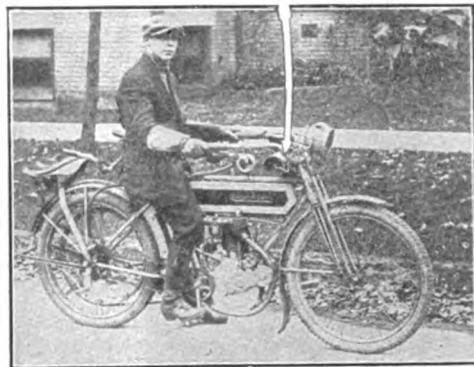
If so, you're missing most of the fun of motorcycling—you're tied down to the daylight limit.

But—a RELIABLE source of light, with a lamp large enough, will make your night riding pleasant and SAFE.

Oil lamps won't do—gas generators won't fill the bill either—they're unreliable and troublesome. What you need is a **brilliant, unflickering light** that floods the road ahead, searching out every bump, rut, puddle and other source of dangerous spills.

Here's the answer!

Prest-O-Lite Owners



"Nothing like Prest-O-Lite for service. Always on the job," says Charley Glenn, 2159 East 85th St., Cleveland, O.

Prest-O-Lite Motorcycle Gas Tank

This is your only source of satisfaction—because it's the *only* PRACTICAL lighting system for motorcycles.

It means a *brilliant* and RELIABLE light for you—steady under all road conditions. Turns on and off like a gas jet. The neat, attractive nickel-plated Prest-O-Lite Tank will add to the beauty and service of your machine, without adding materially to the weight.

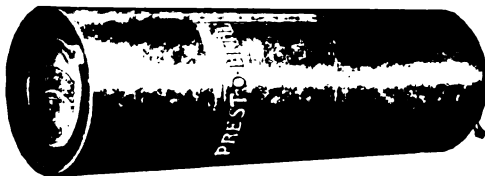
Prest-O-Lite is not expensive. The money you invest in the tank itself is not *spent*, because a genuine Prest-O-Lite tank never becomes second-hand, is always in demand—it's a ready cash asset just like money in the bank.

And any experienced rider will tell you that Prest-O-Lite exchanges cost no more, usually less, than the carbide to feed a generator. Wherever you may be, exchange service can be had from one of our 20,000 dealers (motorcycle and automobile). We will arrange for prompt exchange service for anyone anywhere.

You shouldn't deprive yourself of the added pleasure and convenience Prest-O-Lite will give you. You can't afford to do without its SAFETY. One accident due to poor light will cost you more than a year of Prest-O-Lite service.

Price of Tank \$10

(Equipped with gauge.)



Dimensions: Length, 13¼ inches; diameter, 4 inches; weight, 8¾ pounds. 40 hours of light—easily attached to any motorcycle.

Just a word on Imitations

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one, ANYWHERE and ALWAYS. Imitations cannot.

The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

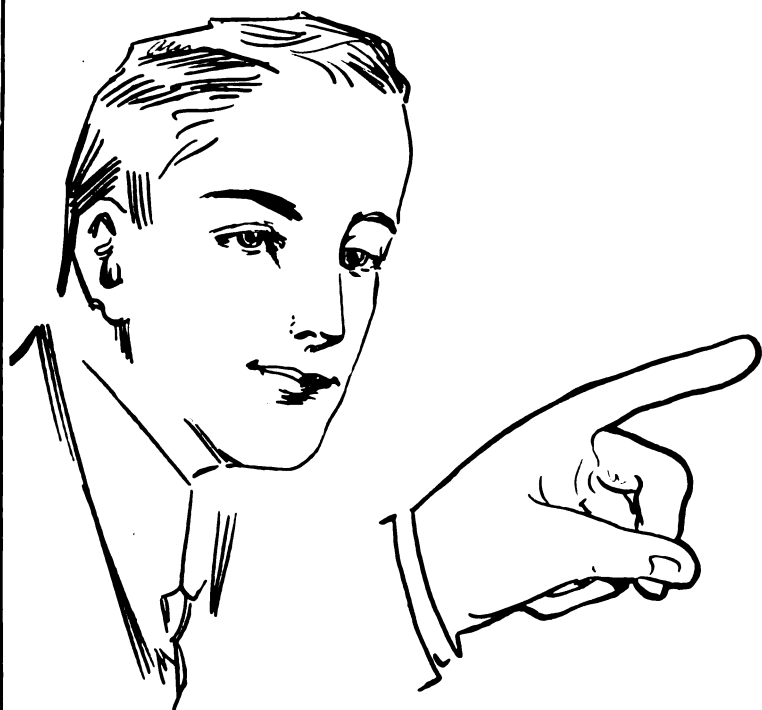
**The Prest-O-Lite Company 246 East South St.
INDIANAPOLIS, IND.**

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

Mr. Dealer! There's a good profit in Prest-O-Lite Tanks and Exchanges. You may as well be getting it, for a simple statement of the facts about the Prest-O-Lite Motorcycle Tank will make the sale. And remember it's a bad idea to get your customers into the habit of going elsewhere for their Prest-O-Lite Exchanges if you want their trade on other things.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



“Saddles”

Inez Patterson rode through the Short Grass Tour. Of course she rode on a Troxel Saddle. There's a reason.

Troxel “No-Bump” Saddles

Always remember to specify them and your comfort is assured. The Troxel is not a *new untried freak*, but a really wonderful combination of leather and spring action. Experienced riders all ride the Troxel because they get the lowest saddle position, and altho' the spring action rides like velvet for any weight rider, you cannot hit bottom. 75% of all the motorcycles ridden carry the Troxel saddle because the riders who know—

Insist on the “No-Bump” Troxel.

Send for new catalog. **FREE**

TROXEL MFG. CO. - - Elyria, Ohio

H. T. Roberts, Selling Agent, 538 S. Dearborn St., Chicago, Ill.

ONE SUPERIOR BRAND OF TIRES

Q THE tremendous resources of the United States Tire Company are devoted exclusively to the manufacture of *one superior brand of tires*.

This one brand is the product of a co-operative method of manufacture absolutely unique in the history of tire building.

Take United States Motorcycle Tires, for instance. The individual features now entering into their construction were tested and proven years ago in two separate brands of tires, each of which had a world-wide reputation for high quality. Through this procedure every element of theory and experiment is eliminated from United States Tires. This is important to every tire user as it safeguards him against excessive cost and unsatisfactory service.

The actual manufacture of United States Motorcycle Tires is directed by four corps of specialists, each of whom has intimate and expert knowledge of every angle of the tire-making industry. And back of these men are four great factories of tremendous capacity, each equipped with the most modern machinery and appliances known.

It is inconceivable that *four* perfectly dove-tailed organizations by uniting all their skill, all their knowledge and all the resources at their command should not approach nearer to perfection in tire building than one man or one body of men.

That tires so made are exceptionally economical tires to use is proved by the mileage service United States Tires give under all sorts of road conditions.

UNITED STATES TIRE COMPANY
NEW YORK
Dealers Everywhere

VOL. 7

MOTORCYCLE ILLUSTRATED

NO. 18

SEPTEMBER 5, 1912

FIRST DAYTON MOTORCYCLE ON TIME

Banquet Marks Initial Appearance of Davis Company's New Product

BY way of celebrating the completion of its first motorcycle, which was finished in time for a display at the Made-in-Dayton exposition, the Davis Sewing Machine Company, of Dayton, Ohio, entertained about forty of its employes at a banquet. The social program was arranged under the direction of Superintendent J. C. Lester and was given at his residence.

Some time ago the Davis company, already holding an international reputation for its sewing machines and bicycles, decided to enter the motorcycle field and its expert designers were set to work on plans which had been outlined by Superintendent Lester. Exhaustive tests were made as the work progressed and in a short time the company officials were convinced that they could manufacture a motorcycle up to the high standard set for their other products. The staff was then ordered to put on full speed in order that the first machine might be ready for exhibition at the Made-in-Dayton fair. In order to comply with this arrangement the men were called upon to work night and day, and the banquet referred to was tendered as a mark of the company's appreciation.

Commenting on the company's new product Superintendent Lester said: "We have laid great plans for the Dayton motorcycle,

as the new machine will be called, and we hope in time to make our motorcycle plant one of the largest in the world. We are now turning out about 125,000 bicycles annually. We expect to be able to supply dealers with Dayton motorcycles in about thirty days and we will be prepared to make rapid deliveries."

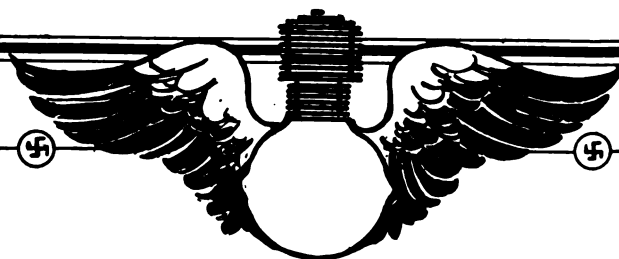
It is announced that T. C. McDonald, official tester for the company, will make a long tour through the eastern states on the exhibition machine, starting in a week or two. He will be prepared to allot territory to dealers and give demonstrations in each city and town along his route.

MEETING OF CREDITORS.

NOTICE is given that a meeting of the creditors of the Pierce Cycle Company will be held in the Federal Building in Buffalo, N. Y., at 11 a. m. on September 12, to consider a proposed sale of the assets of the company. The present trustee, Lawrence P. Hancock, is not authorized to continue the business after September 9.

JACKSON IN THE WIGWAM

E. M. JACKSON, formerly of the Miami Cycle & Manufacturing Company, will enter the sales department of the Hendee Manufacturing Company on October 1.



INDEPENDENT SHOW FOR CHICAGO

Plans Are Clinched for Big Motorcycle Display February 3-8.

ANNOUNCEMENT is made that on August 29 the Show Committee of the Motorcycle Manufacturers' Association closed a contract with the Manufacturers' Exhibition Building Company, of Chicago, for 13,000 square feet of floor space to be devoted to an independent motorcycle, bicycle and accessory show which will be held during the week of the first automobile show in the Windy City, February 3-8. The building in which the independent display will be given is located at 1319 Michigan avenue, a point easily accessible, and it is stated that most effective arrangements will be made for the exhibition of the machines and their accessories. There will be ample space for all the motorcycle and bicycle manufacturers and for a goodly number of the accessory makers.

President A. B. Coffman, of the M. M. A., is convinced that the coming show in Chicago will mark an important epoch in the upbuild-

ing of motorcycle business, and that it will pave the way for such wide-spread consideration of the motorcycle's advantages as has not been possible heretofore. President Coffman has argued for some time past that motorcycles were out of their element when competing for attention with pleasure cars and automobile trucks in a general show, and all his claims for the superiority of an independent motorcycle exhibition will undoubtedly be backed before the coming display is a day old.

The Show Committee is being enthusiastically supported in its work by the manufacturers and now that motorcycles are to be allowed all the latitude necessary trade boosters are preparing to make more elaborate displays than ever before. The mere announcement that space has been obtained has put the trade workers on edge for big things and that they will be forthcoming is as safe a wager as any motorcycle enthusiast will have an opportunity to make in a blue moon.

CLASSY MEETS ON NEWARK TRACK

Hasha, Seymour and Peck Bump Dad Time On Jersey Bowl and Simon Pures Also Show Well.—Match Races Draw Big Crowds.

NEWARK, September 2.—Notwithstanding the threatening weather 5,000 fans turned out to see the match race between Eddie Hasha and Ray Seymour on the motordrome today. They were doomed to disappointment, however, as at the last moment Hasha refused to ride the match, claiming the purse was too small, and that he had never been approached by the manager about riding it.

Manager Paul Derkum claims that Hasha held out for more money when he found out the speed that Seymour was traveling. Ray Peck was substituted for Hasha, and he made a good race of it, but Seymour was the victor by a good length in both heats. Seymour beat Hasha in the first two heats of the Class A event, and Hasha retaliated by winning the final and the free-for-all. Seymour went bad in this event owing to trouble with his stomach which made him too dizzy to keep up with the flying Texan.

One of the best races of the day was the final heat of Class B event in which there were five riders. Frank King, of Denver (Indian), won out by a length from Johnny King, Newark, (Indian), and Fleckenstein, of Denver, (Indian), finished third.

NEWARK, N. J.—Ray Seymour's debut in Newark on Saturday, August 24, did not cause a rush to the races in the way the management expected. Newark is new to the motorcycle game and does not know the big factors in it as yet. The feature of the day was the match race between Ray Peck (Excelsior) and Seymour (Indian). Seymour won both heats. Larry Fleckenstein, of Denver, eliminated John King, of Newark, from the sweepstakes by catching him in 2½ miles, doing it in 1:51.

SUNDAY, August 25.—The announcement that Ray Seymour and Eddie Hasha, Newark's idol, would ride a match race on their big 8-valve Indians brought a crowd of 10,000 people to the motordrome today and taxed the seating capacity and arena to its

utmost. Hasha had been ill and felt so weak that it was thought it would be impossible for him to ride. Eddie did not wish to disappoint the crowd, however, and getting his physician's permission, he agreed to ride the match. The match race was a thriller. The boys jockeyed for a start and went slowly around the saucer, watching each other closely, and changed positions at every lap. On the bell lap Seymour was leading with Hasha clinging in his pace. With bodies flattened down on the tank they both opened up wide, and the crowd saw Hasha pull slowly past Seymour and win by half a wheel's length. Hasha's wheel wobbled perceptibly all through the race, and when he came to a stop he was carried from the track and revived for the next heat. He came back a little stronger and a little more confident. The second heat was started at a faster pace, with Seymour leading. Getting a little jump Seymour opened up and increased his lead, but Eddie closed the gap and took the lead. Seymour could not get by him, and they finished in that way, a wheel's length separating them.

FINAL DIVIDEND.

H. TATEM PATTEN, trustee for the Reliance Motorcycle Company, of Owego, N. Y., has filed a report requesting the declaration of a final dividend, and creditors of the company, are given notice to appear before Referee Benjamin Baker at 9 a. m. on September 10 at the law office of Fred J. Davis in Owego to show cause why such action should not be taken.

ZEISLOFT ON THE STUMP.

DAN ZEISLOFT, formerly on the publicity staff of the Diamond Rubber Company, has withdrawn from trade circles temporarily to take the stump for the Republican party in New York State. Zeisloft explains that he intends to talk motorcycles once more when the election has been disposed of, provided he survives the strenuous campaign.

DENVER COPS IN TROUBLE.

DENVER, Col., August 30.—Police Commissioner Creel and Adjutant-General Chase have a fight on over the new khaki uniform worn by the traffic squad and speed officers, and unless one or the other backs water a dozen Denver policemen may be arrested within the next few days. General Chase has sent notice to the Fire and Police Board that the khaki uniforms of the motorcycle police too closely resemble the uniforms of the officers of the United States Army and that the State law prohibits civilians from wearing even a single garment conforming with the regular military garb. The law provides a fine and jail sentence for every violation.

While Chase is insisting that Creel cannot dress his motorcycle policemen like soldiers and is threatening to swear out warrants against the policemen who appear on the streets in military uniforms, Creel and the Fire and Police Board are smiling and refusing to regard the matter seriously.

BUSY KITTLE PLANT.

S. L. LYON, well known to motorcyclists in S. Los Angeles and vicinity, has accepted a position as manager of the Kittle Manufacturing Company's headquarters in Los Angeles. He reports that out of 1,337 motorcycles in the recent run of the Los Angeles M. C. to Venice 923 carried Kittle attachments. The Kittle factory is running night and day to meet the demands being made upon it, and new machinery is about to be installed to facilitate the manufacture of the company's products.

ANGSTEN-KOCH PATENT.

ANNOUNCEMENT is made by the Angsten-Koch Company, of Chicago, that it has been granted the first application for a patent on its Simplex tandem attachment. The patent, which was issued on August 27, is number 1,036,702.



ABOVE is a reduced copy of the engrossed resolutions sent to President Paimier, of the Continental Rubber Works, as an expression of the appreciation of the jobbers who were the company's guests at Erie, Pa., Saturday, August 10.



"SILENT" L. R. BOWEN
THE METEORIC MERKELITE

International Tour

Donald McKie

Part III

FOLLOWING is the third installment of the touring article being written exclusively for *MOTORCYCLE ILLUSTRATED* by Donald McKie, one of the four motorcycle tourists from Atlanta, Ga., who sailed recently for a 6,000-mile trip through western Europe. The first two installments of the article dealt with the journey by motorcycle from Atlanta to New York city; the present story gives interesting sidelights on roads and motoring customs in and near Copenhagen, Denmark, where the tourists left the steamer, and also embodies much practical information for the American rider who contemplates a European tour by motorcycle.

We arrived in Hoboken with a great rush half an hour before the steamer sailed for Denmark, but once on board we had no end of leisure. There was practically nothing to do throughout the ocean trip but read, eat, sleep and wish for our motors, so that this stage of our trip demands only scant attention. Previous writers have given all the available information concerning the crating and shipping of machines; these matters are quite simple, after all, and need cause a prospective foreign tourist no uneasiness. It suffices to say that our journey across was without incident, and in due time we found ourselves strolling up the wharf at Copenhagen.

Acting upon advice from the Royal Automobile Club of England, we had decided not to ride in Denmark before leaving for Sweden and without being taken out of the Customs House, known in Copenhagen as the Free Harbor, our motorcycles were placed aboard a boat for Malmö, Sweden. This trip requires two hours, and on arriving in Malmö it is a very simple matter to obtain a temporary driving license at a nominal fee. It is worthy of note that we arrived in Copenhagen on July 3, and having forwarded our motorcycles to Malmö we were obliged to get along without them over the Glorious Fourth.

Ideal Country for Endurance Riding.

At this point we feel called upon to warn endurance riders and American trans-continentalists against touring in Norway and Sweden, for motorcyclists with these inclinations would never find time to rest in this territory. The reason is a simple one; there is no night worthy the name. In Christiania, Norway, for instance, it was never necessary to burn street lights while we were there, daylight being practically continuous throughout the twenty-four hours. In the window of one of the motor shops we found a sign which informed us that automobile lamps were to be lighted at 12.01 a. m., and two hours later another day had dawned. In other words, the tourist here gets only a hint of darkness, and gas tanks for motor lighting purposes must be almost superfluous.

After making the necessary arrangements at

In Denmark—The Olympic Games—Good Roads and Fine Scenery



A Danish Inn.

Malmö we took to the road and found the highways in southern Sweden composed mostly of clay. From this it will be seen that traveling is good only in fair weather. About halfway to Stockholm, however, well-kept macadam is found and we had no trouble except in getting around occasional rock piles where repairs were being made. The country is given up to farms. Gasoline, or motor benzine, as it is known here, can be procured almost anywhere in cans. We found that the roads had many dangerous turns, but as there was very little traffic over them we made fairly good time.

In Stockholm for the Big Games.

When we arrived in Stockholm the city was aflutter with decorations for the Olympic games. We rode out of the city about four miles to witness the start of the 200-mile bicycle race. The first men were sent off at 2 a. m. and there was plenty of light. Much

regret was expressed by the members of our party, and doubtless by hundreds of others, that a big motorcycle event could not be staged, but the Olympic contests must be genuine tests of physical strength and the officials do not regard motorcycle races as anything more than mechanical tests. Wherein they are sadly mistaken, as every full-fledged motorcyclist knows. In Stockholm we met the first Americans we had seen since leaving the boat and they looked mighty good to us, as the saying goes.

Just before leaving the city we met Carl Larson, of East Saugus, Mass., and Frank Jansen, of Providence, R. I., who were touring Sweden on Indian sevens. They reported no trouble and had enjoyed the run from Malmö to Stockholm, about 400 miles. From Stockholm we returned to Copenhagen to begin our tour of Denmark. It was necessary to obtain papers permitting us to bring our machines in without duty, and we had some difficulty in convincing the officials that one new tire and two leather treads which we were carrying were for our own use and not for sale. They finally passed us, however.

Viewed by Danish Crowds.

On our way to the police station to obtain our driving licenses we discovered a motorcycle shop and dropped in. The proprietor inspected our machines and was deeply impressed with them, so deeply in fact that he is to become an agent for the Indian. The proprietor, Walter by name, is now handling the Hobart and the Stewart two-stroke, both English-built machines. He stated that the total motorcycle sales for the country footed up to about 400 machines a year. Half an hour later we had obtained our licenses and were riding in the streets of Copenhagen. The cost of the visitor's permit to ride all over Denmark is only two kroner, about 54 cents. Ordinarily it is necessary to go before the fire department officials and demonstrate the efficiency of brakes and permit of an inspection of the machines, but Mr. Walter managed to save us this trouble.

It is necessary to carry the number plate on the front of the machine and it is fastened there by the police. The last requirement is an official lead seal, similar to those used on freight cars in America, which is attached to the number plate. Without this seal the driving license is not valid. We enjoyed a trip into the country with a number of Copenhagen riders and in the evening a banquet was arranged in our honor. The riders treated us royally. On the following morning we were photographed by a representative of a newspaper and a picture with a column of reading matter concerning us appeared later in the day. Needless to say, we did not know what it was all about, being unable to decipher a line of it.

After a sight-seeing trip through Copenhagen we decided to strike out for new adven-

tures, and the riders of the city gave us a royal send-off. We left Copenhagen with two suitcases strapped on the carrier of one machine, one case on another and the regular passenger on the tandem seat of the third motorcycle. A young man on a 2½ Hobart acted as our guide out of the city. We found the streets narrow in the business district, but once on the country roads we had excellent going. All roads have posts giving the distance in kilometers to the next town, and cross-roads are also carefully marked with signs. These signs and a road map, which we had purchased for fifty cents, enabled us to make good progress and keep to our route.

It is worth noting that all railroads here are controlled by the government and as a result they are well guarded at every grade crossing, something that cannot be said for our railroads in America. At Vordingborg we made a short stop to visit the remains of a castle built in the seventh century. Leaving Vordingborg over fine roads we went to Kallehave, a fashionable summer resort. Here we witnessed what to us was a most remarkable sight, an elderly lady wearing glasses and smoking a big black cigar. This appears to be an ordinary arrangement in Denmark, but it sort of bowled us over.

No Lack of Striking Scenery.

On the following day we visited the island of Moen, going by ferry. The trip costs 13½ cents for each machine and five and a half cents per passenger. We rode to the chalk cliffs on the island and enjoyed the scenery, which was of a character entirely new to us. When we were ready to leave it was nearly 6 p. m., and we stowed away an excellent meal, prepared in typical Danish style. We were joined by Mr. Walter and another motorcyclist whom we had met in Copenhagen and we rode together for a time. Walter had a passenger on his little 2½ Hobart, but the machine stood up well under its double load. The other rider used an Ellehammer machine, 1907 model, which was still in excellent condition. This machine is a queer-looking Danish mo-

del, the rider's position being almost the same as that of a person standing. Ellehammer, the manufacturer of the machine, is said to have been the first man to use an aeroplane in Europe.

Although none of us knew a word of Danish we had little or no trouble on the road. When it was necessary to inquire the way of a farmer, for instance, we simply called out the name of the town we aimed to reach and then pointed in the direction we thought it might be. If we were wrong the farmer would point in another direction and that was the end of it. We put up for the night at Nykjobing, a town of 10,000 people, and obtained good beds at the Phoenix Hotel for 54 cents. There we learned that the boat running from Denmark to Germany did not leave until 2:30 p. m. the following day, so we had plenty of time. We had only 20 kilometers more to ride in Denmark.

In the Kaiser's Realm.

We made a leisurely run to the ferry on the following day and boarded the boat for Germany, managing to get through without having to drain our tanks of gasoline. It required two hours to make the trip, and the fare was 73 cents for each passenger and 43 cents for each machine. On landing in Germany we encountered the customs officers who weighed our machines, examined our papers and then escorted us to an office where we received our numbers and driving permits. At the office we had to show our papers again and after waiting about an hour we received a little card which entitled us to ride in Germany for 30 days at any time within a year. When leaving the country a rider has this card stamped and it is stamped again on his return so the officials are certain that he does not remain over 30 days in all.

A rather large number and wire to fasten it with was supplied and we were charged five marks, this, with three glasses of beer for the officials, bringing the cost to \$1.24 for each of us. From what we had read of touring in

Germany we expected to be tied up for two or three weeks and to suffer about everything except execution before we received our permits, but the whole operation was quite simple. Perhaps this was due to the fact that before leaving home we secured from the Secretary of State in Georgia an official paper stating that we were duly licensed there; later this paper was passed upon by the German Consul. We would advise all American motorcyclists who contemplate a foreign trip to follow this plan.

The Outlook in Denmark.

Before taking up the story of our trip into Germany let us say a few words concerning the advisability of touring in Denmark and the outlook there for the motorcycle. If one merely wants good roads Denmark is an ideal country for the motorcycle tourist, for the roads are monotonously good; nearly all macadam and well kept. At the side of nearly every road is a bicycle path and riding on this is the very limit of comfort. However, the scenery is not particularly striking, except on the island of Moen where the chalk cliffs are well worth seeing. The country generally is given up to vast farms, quaint old houses and windmills. These notes refer to the country only as far north as Helsingør, for we were not above that point.

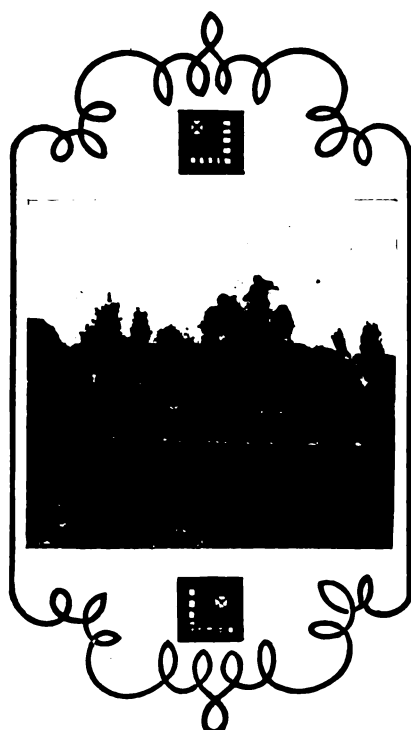
As to the future of the motorcycle in Denmark, it should certainly be good. With the excellent roads which prevail there should be ten times as many motorcycles in use as there are at present. Bicycles are very popular, thousands being seen on the streets of Copenhagen alone, and it is only reasonable to believe that many of these riders will join the motorcycle ranks when they become acquainted with the attractions of the motor two-wheeler.

A Puncture Causes Trouble.

Leaving Warnemunde we struck out over German roads and soon reached Rostock. The roads were fairly good but in the towns the cobblestone pavements made us sore, physical-



On the road near Copenhagen.



Fountain in Copenhagen.



Ferry to Isle of Moen.
Among the Hills.



ly and mentally. About ten kilometers out of Rostock we sustained a puncture in the rear tire of the tandem machine, on which we were using a leather thread, and we had our own troubles before we were able to start again. It is no small job to locate a small hole in the inner tube and then replace the leather cover. It happened that we stopped near a pool of stagnant water and a gang of mosquitoes made things hot for us. While we were making the repair a native approached and we drove a bargain with him to house us overnight. He proved to be the keeper of a roadside inn.

We lost count of the number of eggs that we stowed away at supper, and in a short time we were in the hay, sometimes referred to in jest, but literally true in this instance. The charge was very reasonable, only two marks, 48 cents, each for lodging, supper and coffee in the morning. It appears, by the way, that coffee in the morning is always included in the price of lodging here. We started rather late on the following day and found little to interest us on the road. The scenery was not inspiring and our only amusement lay in sampling apples and cherries which grew in abundance along the highway.

The Arrival in Berlin.

That night we put up at another roadside inn, in what appeared to be a full-fledged wilderness. We turned out in the morning fresh for our ride to Berlin and aside from the cobblestones encountered in the towns we had no trouble on the way. The most important town we struck on the road to Berlin was Neustrelitz where we found a large dairy and drank much milk before continuing. On leaving this place we soon ran into some small hills and almost before we realized it we were on the outskirts of Berlin. We stopped about three miles out of the city for the night, not caring to ride in until the next day.

On our arrival at the capital we were duly impressed, but we must say that motorcycles are not as plentiful as might be expected. Quite a number of Cyclonettes, as they are called, are used for delivery vans. These vehicles have three wheels, two in the rear, and the engine is placed directly over the front wheel, which is chain driven. There is a two-speed gear and a long handle for steering.

Gasoline Comes High.

Wherever we have stopped our machines have attracted much attention. We have found that nothing gives the onlookers more pleas-



In Copenhagen; tourists surrounded by a curious crowd.

ure than twisting the grips and watching the levers work. Apparently they are puzzled by the operation of the enclosed controls as used on American machines. Looking back over the section of our tour just finished we must say that roads in Denmark are far superior to those we have traversed in Germany. By this comparison, however, it should not be understood that German roads are poor, but simply that those in Denmark are better. In both countries we have found the natives genial and inclined to welcome the visitor.

We have found the price of gasoline rather high, both in Denmark and Germany, but the quality appears to be good and we have not felt like complaining seriously. With the 7 h. twins we have averaged somewhat better than 65 miles to the gallon, but to secure this satisfactory mileage we have operated our machines very carefully. We have traveled quite slowly, running most of the time with spark advanced and throttle entirely closed. On the whole our expenses on the road have not been high, but on the next leg of our tour we may find something that will cause us to dig deeply into our wallets. However, we are crossing no bridges until we reach them, and we do not expect serious trouble.

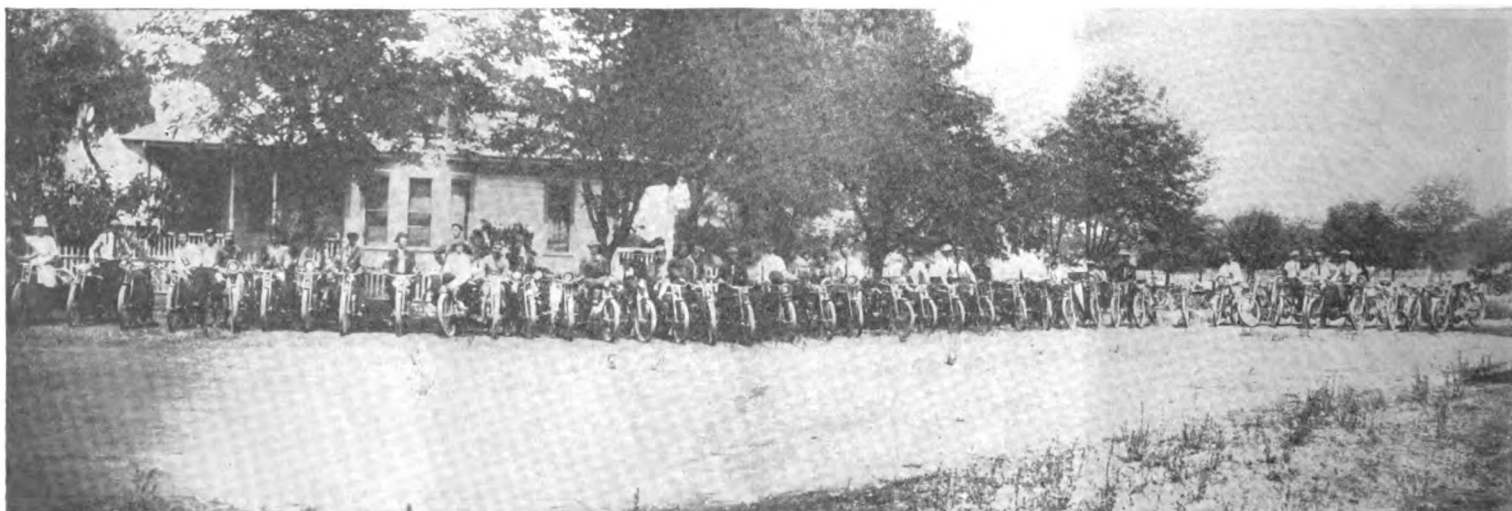
NO BOWL FOR MONTREAL.

IT is reported that Jack Prince, the prince of board track builders, was a recent visitor in Montreal, Quebec, to look into a proposition to erect a motordrome there. The project received its quietus, however, it is understood, when an attempt to hold a big motorcycle carnival resulted in a heavy loss.

Toronto has the board bowl bug again, however, as a movement is on foot there to establish a motorcycle plant at Dufferin race-track, a little used trotting ring, in view of the difficulty encountered in obtaining permission to use the Exhibition track for racing.

AFTER CANADIAN BUSINESS.

THE Prest-O-Lite Company of Indianapolis, Ind., is making a big bid for Canadian business. Factories have been established at Meritton, Ontario, and Winnipeg, Manitoba, to turn out gas tanks for the Canadian trade, while an up-to-date branch store has been opened at 722 Yonge street, Toronto, where all sizes of tanks may be immediately exchanged. H. R. Weckerle, of Indianapolis, is in charge of this station. The manufacture of tanks at the Meritton factory began on August 26.



Line-up of Harley-Davidson riders who took part in recent big meet in Livermore, Cal.

DENVER'S NEW POLICE SQUAD.

SPEEDERS beware! Denver's motor police squad went into action August 1 and the men in khaki will get you unless you are exceedingly careful in the matter of running within the speed limit and observing all the other rules set down by the fire and police board for motor-propelled vehicles. Hereafter even the remotest sections of the city will be patrolled and speeders who have been in the habit of "sneaking" just a little on the outskirts, where formerly there was no one to raise a detaining hand, will find themselves the object of attention from members of the new motor squad.

The officers will make their headquarters at the outlying fire stations, reporting by telephone to police headquarters every half hour. In addition to regulating motor traffic, they will be used for emergency work. The uniforms of the men are of olive drab cloth, fashioned after the uniforms of the United States Army field officers and consisting of cap, jacket, riding trousers and puttees, not to mention the life sized star on the left breast of each.

The squad includes Officers U. H. Baker, Denver's first speed officer; Henry Barr, another veteran, and six new men who have never before piloted a big seven.

A SIDE-CAR CONVERT.

LAURENCE BIGLER, proprietor of a busy motorcycle headquarters in Goshen, Ind., recently made two trips to Chicago, a distance of 131 miles, in six and a half hours with his Excelsior twin and side-car. He was accompanied by Dan Boomershine, his mechanic. Bigler argues that the side-car has doubled the pleasure-giving possibilities of the motorcycle. He finds that instead of hampering the machine on bad roads the passenger attachment serves to steady it and thus enable the driver to pick his way along.



A GREENWICH ENTHUSIAST.

GEORGE BARNES, who appears on the machine in the accompanying photograph, is the M. M. agent in Greenwich, Conn., and a booster of the new school. He believes that the side-car is a real motorcycle asset and practices what he preaches by driving an M. M. hooked up to one of the comfortable passenger attachments. Barnes is almost as proud of his motorcycle outfit as he is of the three contented-looking youngsters who have snuggled down in the basket for a trip with "Dad."

SAN FRANCISCO police are to have seventy-five motorcycles for general service.

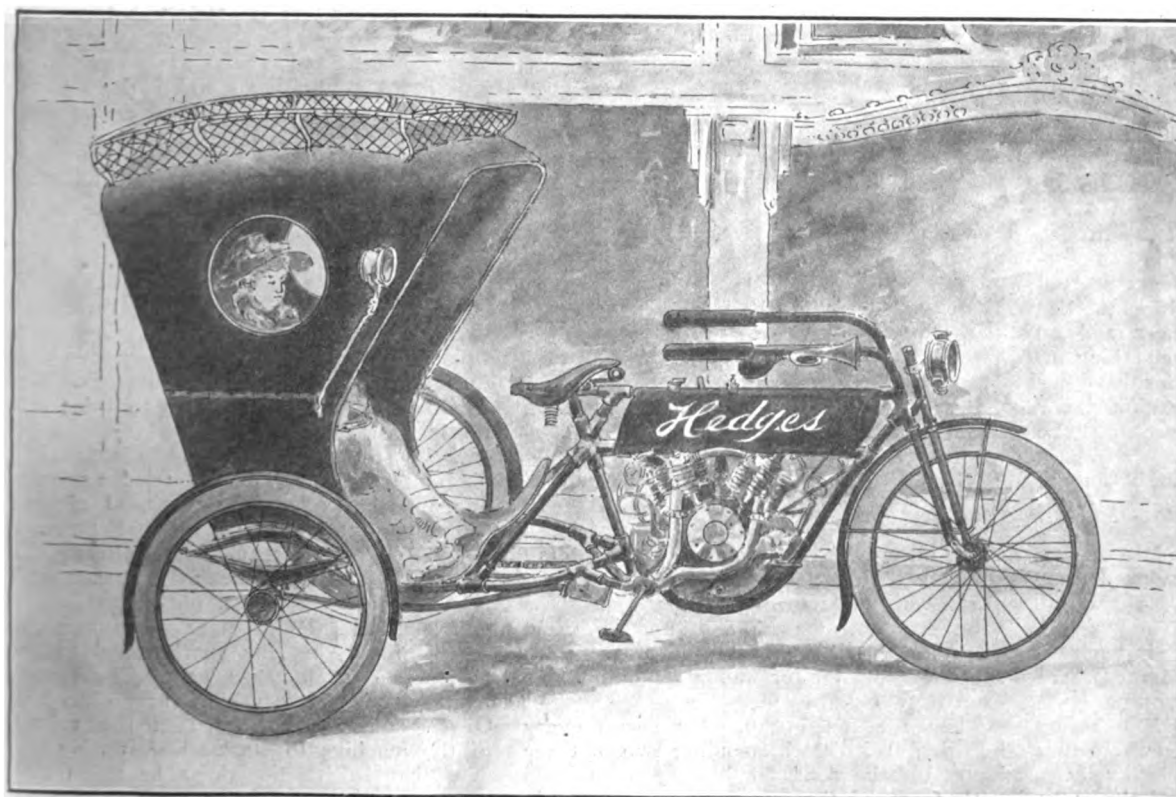
ANOTHER CITY IN LINE.

UNDER a new motorcycle ordinance to take effect September 2, in Flint, Mich., unless a machine is built to accommodate more than one person it will be unlawful to carry a passenger. In no case will the driver be allowed to have passenger in front.

A SIDE-CAR HANSOM.

IN striving to perfect an economical vehicle which would fill the breach between the street car and the ordinary taxi-cab, H. K. Hedges, of Hedges Laboratory, 108 North Spring street, Los Angeles, Cal., has designed the outfit shown in the accompanying illustration. The side-car attachment follows the general lines of a hansom cab and closely resembles a new side-car model with which experiments are now being conducted in London, Eng. The cab is light in general construction but sufficiently strong to meet all the requirements, and the designer is convinced that it will add very little to the upkeep of an ordinary motorcycle. A windshield, carried under the seat, may be quickly arranged in the event of a storm, and another handy feature is the rack on top of the cab which permits of carrying suitcases or other similar articles.

Designer Hedges believes that such a cab as he describes will become very popular in cities like Los Angeles and New Orleans, where a motorcycle outfit may be used all the year round and where there are many tourists who would be attracted by a quick, comfortable and economical means of transportation to hotels and points of interest. The idea seems to have possibilities.



The STORY of a MOTORCYCLE CONVERT

BY THOMAS C B TYLER

*Riding in the old days
compared with the
pleasure of driving
a modern single-tracker.*

MY antipathy to the single-tracker dated from the early days of the machine, when controls were on the tank, belts everything but a joy, efficient mufflers a dream of the future and reliability a will-o-the-wisp. The care and attention, the petting and coaxing necessary to keep the thing running did not appeal to me as fun or pleasure, and the price seemed too much to pay for a mere toy. After a short period of activity, in which several machines were disposed of, the dealer in our town quit the business and in a year or so motorcycles were as scarce on our streets as the proverbial white blackbird.

A little over a year ago the revival started. The appearance of several machines that would actually run, that would start without half an hour's fiddling with the various parts, did much to convince some of us that we were overlooking a bet and perhaps missing something that was chock full of fun. We of the laity would question, watch and make fun while at the same time we were envying the proud possessors of machines.

The "put-put" of a cycle would arouse us from any work or dream and the stopping of the machine in our immediate neighborhood would cause us to sally forth and bombard the rider with queries and compare his machine with others we had either seen or read about. A machine standing beside the curb was sure of a crowd of interested spectators, and the group would stare in open-mouthed surprise if the rider was able to get started without pedaling one to two blocks. We thought starting should be easy and so when it became the accustomed thing to see a rider get his mount under headway without a world of back-breaking labor several decided that the game must be worth the candle and invested.

An acquaintance of mine bought an old $3\frac{1}{2}$ single and seemed to have so much enjoyment adjusting the carbureter, monkeying with the timer and renewing batteries, that I became convinced that something like that was the very thing I needed to relieve me of ennui and to occupy some of the spare time that hung so heavily on my hands. He told me where I could get a second-hand machine quite reasonably and got so interested in seeing that I got one that he hunted up the owner and sold it to me himself—fine business. The original owner had tired of the sport

and was willing to sacrifice to get it off his hands. There was nothing wrong with the bus; oh, no, nothing wrong. The carbureter needed adjustment and a new valve lifter would have to be obtained; otherwise the machine was in fine condition, so I was told.

One week after purchasing I made my first trip. In the meantime I had taken the carbureter apart approximately one thousand times and as perseverance overcomes all things I was finally rewarded by having it work. The broken valve part had been improvised out of a nail bent to resemble a letter Z. This was fastened to the cylinder head in such a way that when the throttle was closed it depressed the intake valve and released compression. My first ride worth talking about was to a little town and return, going one way and coming back another. The oiling system was now the conundrum and as long as I owned the machine it remained a puzzle; either too much or not enough was the rule. Once the piston stuck when I was thirty miles from home and some distance from any house. Not a thing did I have to put oil into the cylinder, but necessity devised a way. I unscrewed the oil supply pipe and making a cornucopia out of an old letter the feat was accomplished.

I seemed to have every conceivable sort of trouble. The gas pipe broke; the oil pipe did likewise. The vibration of the engine was so intense that one time it was being held in the frame by only one bolt when I noticed it. Another time, running to escape a shower, I was compelled to stop time and again to tighten the screws in the outside flywheel, which seriously threatened to come off.

A Troublesome Mount.

I would have one good ride, then have to tinker with the machine for several days to get her in tune again. The power, only $2\frac{3}{4}$ h.p., was also a constant source of worry, so I commenced to look around to see if I could not find someone who wanted a cheap machine. I was lucky, and by adding a little coin of the realm I left a certain dealer one fine morning with a four horse battery model of a standard make, V belt, grip controls, power to spare, as much speed as I cared for and a good looker—even if two years old.

Then the fun began. I was up every morning at 5 o'clock spending two or three hours on the road. I became acquainted with more of the surrounding country in

one season than I had in all my previous twenty years of residence in this community. I found charming drives where I least expected them, beautiful scenery in places undreamed of, a pleasure and satisfaction in the performance of the old bus that was truly enjoyable. My experience with the former mount was the best possible training to teach me to keep a good one in fine trim. But three times did she stall when I was unable to have her working in a few moments. One time the cotter pin of the intake valve spring broke and was caught under the exhaust valve as it descended. This bending the valve an infinitesimal part of an inch was sufficient to destroy the compression. To the eye the valve seemed to seat as finely as ever and the simple expedient of marking the valve with a lead pencil, then twisting a few times to make sure if the seating was correct, was unknown to me at that time, so to a repair shop I wended my way.

A Mysterious Ailment.

Another time had I not been in a hurry I could have found the trouble. It was in the carbureter; a spring holding the air valve slipped off the post to which it was fastened and stuck in a groove. I took it to a repairman and had to leave; he found the trouble but refused to tell what it was and I never knew until the same thing happened the second time. Then I drilled a hole through the post and put a cotter pin through that, and I believe the spring will stay in place for some time to come.

The third case has always been a puzzle to me and it also made the repairman guess a little. I was just entering town, spinning along at a moderate pace when the motor suddenly refused to work. The quickness of the stop led me to infer that the electrical part of the machine was out of kelter and, sure enough, no spark was obtainable at the plug. I tried an extra one and that refused to work. I cleaned the commutator and still no spark; then I tested the batteries and found them quite low. I walked to the first garage and bought three new ones, put them in and still no spark. I went over all connections several times, but the spark failed to appear, so to the shop we went. The repairman examined everything, pronounced it O. K. and was nonplused at the refusal of the machine to start. Unfastening the wire that led to the timer he again tied it to several parts of the machine, but no

spark would come and he started to raise it up out of the way so that he might look into the commutator. As the end of the wire brushed by the carbureter a big fat spark leaped forth, much to our astonishment. Refastening to the timer I got in the saddle, kicked her over and she went with never a miss. Where had the juice been all the time?

How the Fascination Grows.

Such things as these, one might think, would have a tendency to dampen the ardor of a person for the sport, but they don't since the little accidents and mishaps come so seldom with the improvement in machines. And then what can compare with a spin some early morn, some afternoon or on a drowsy Sunday? You mount the old bus and proceed to leave the town, the heat, the dust, the traffic. The houses become more scattered, the pavement ceases and dirt roads are encountered. You increase the speed, feeling a thrill of pleasure as you notice the machine pick up and at the knowledge that you have such power ready to do your bidding. You come to a hill and go up without hesitation. A bit of sand is met and you work your way through with some slight misgivings as to its treacherousness. Again the going becomes ideal and you loaf along, admiring a pretty view or an excellent farm.

A big touring car slips up behind and honks warningly; you let them pass unconcernedly until the man driving the car turns, laughs derisively and waves goodbye to you. Then the race is on. Old Betsy is picking up all the time, but the car being under such headway at the start of the race, continues to gain to the extreme merriment of the young lady occupants of the rear seat, who wave their hands to you to come on. You commence to gain and the car driver opens up another notch; still you gain, for the old bus is just striking her gait. He tries more speed, but you are within a couple of rods of him now and hang there like grim death, re-

fusing to be shaken. The young ladies have ceased their laughter and the driver is doubting the word of the dealer who told him that the car was able to do fifty-five with a full load. The road broadens and you have ample room to pass. The hum of the machine assumes another tone, your speed increases, the old bus has responded to every call and you pass the car.

When you have slowed down again the same car approaches, toots the horn and goes by, but no one laughs.

Finally you reach home. Your lungs have been filled with pure invigorating air, your eyes have seen much that is beautiful, your whole body is atingle with the pleasure brought by contact with Mother Nature. You're a better man for your trip, so hats off to the motor single-tracker.



"Doc" Thornley (to the left) and former F. A. M. President Hamilton (in Goodyear balloon).

THESE RIDERS CART LUMBER.

MINNEAPOLIS, Minn.—It has remained for motorcyclists in Minneapolis to introduce the two-wheeled "lumber wagon." Recently pedestrians heard a clatter as of a runaway team dragging a wagon, and scampered for safety before ascertaining the real cause. Up the avenue at high speed came two motorcycles. Beneath the seat of each machine was a small hanger into which the end of a heavy jag of lumber had been fastened. The other end of the load dragged on the pavement.

The two motorcyclists were Francis and John Markoe, of 5410 Lyndale avenue S. They are building a house in a suburb in the southern section of the city, and have devised the above means for cutting down carting expense. They say that as much as 400 feet of lumber has been hauled by the motorcycles in one load and that the work can be done much more cheaply in this way than the lumber companies can do it.

TYPESETTING BY MOTORCYCLE.

WHEN a heavy storm played havoc with the Phoenix (Ariz.) electric service newspaper workmen operated linotype machines by connecting a motorcycle with the main drive shaft of the typesetting system, and turned the paper out on time.



Affiliated Club Certificate.

F. A. M. TOUR AWARDS.

NEARLY 400 motorcyclists in twenty-one states have just received from G. B. Gibson, secretary of the F. A. M., certificates of honor for successfully completing one leg of the F. A. M. tour to the recent convention at Columbus. The certificates have been especially prepared suitable for framing and are being sent to the riders as a reward for motorcycle sportsmanship. In addition to the certificates the riders were presented with gold medals by the F. A. M. before they left Columbus for the homeward trips.

NERVY THIEF IN SYRACUSE.

SYRACUSE, N. Y., has a thief whose nerve is up to the standard. A few days ago a motorcycle used by the police department was stolen and at latest reports there was no clue to its whereabouts. It is suggested that a thief who has the effrontery to take a department machine may also have his eye on the patrol wagon. The missing machine is described as follows: single cylinder Harley-Davidson; magneto and free-wheel; motor number 2775B.

George A. Sun, also of Syracuse, reports the theft of his Harley. The motor was number 4103. Both these machines are 1912 models and practically new.

E. A. Slover, chief of police of Portland, Ore., reports the theft of a twin-cylinder Harley-Davidson, 6½ h.; state license 7645 and factory number 3822.

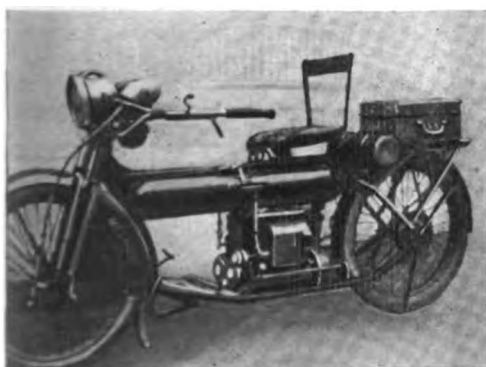
EMPIRE STATE ROAD SIGNS.

FRANK D. LYON, secretary of the New York State Automobile Association, is working out a plan to distinguish each main route throughout the State by an individual color. The routes leading from the main highway will be painted with combination colors.

The route from New York to Buffalo, for example, would be distinguished by the top rail of the State fence being painted blue. Each bridge will have a painted strip about two feet in width, and the telegraph poles will also have a section painted to correspond to the color of the fence. Through each city and town the association will erect colored discs, similar to the well-known Goodrich signs.

LONG ROAD RACE.

E. J. HAWKINS and E. F. Kumler recently participated in a race from Cleveland to New York on their motorcycles. They left Cleveland at 6 a. m. Wednesday, August 21, and arrived in New York the following day. Hawkins, who won the purse of \$100, arrived in New York at 10.32 a. m., being six hours ahead of Kumler.



INGENIOUS FITTINGS.

INDIVIDUAL fittings to machines are all ways of interest, and the machine ridden by H. Mason, proprietor of the Melrose (Mass.) Motorcycle Agency, has several that go a long way toward ease and comfort for the rider. The clutch is connected by Bowden wire to the left-hand pedal, which has been disconnected from its normal operation of the brake. A bucket seat with lazy-back is fitted and an extra gasoline tank is mounted back of this seat as will be seen in the photograph.

More

Pointers on

Skidding

*Pennsylvanian Takes
Issue With Writer
Who Charged Most
of Skids to Front
Wheel.*

MURRY FAINESTOCK

IT has been said that we learn most from those whose opinions differ very widely from our own, and I am inclined to believe there is more than a grain of truth in this adage. For instance, I read with great interest Mr. C. A. Shaw's article on "Skidding," which appeared in *MOTORCYCLE ILLUSTRATED* about three months ago. Mr. Shaw concluded that nearly all falls from skidding were due to slipping of the front wheel, and it is just there that our opinions diverge. In my own experience with three motorcycles I have had only two front wheel skids, and in both cases I was able to avoid a fall. The story of my rear-wheel skids is of an entirely different nature.

While it is doubtless true, as Mr. Shaw suggests, that a front-wheel skid is more dangerous than one occurring at the rear wheel, I argue that skidding of the front wheel is so rare that it should cause no uneasiness. Furthermore, if the front wheel does skid, the rider may often avoid a fall by turning the front wheel in the direction of the skid, thus allowing the wheel to revolve and obtain a fresh grip on the surface. Turning the front wheel in the opposite direction from the direction of skidding serves only to aggravate the trouble and makes a fall almost inevitable.

Some Causes of Skidding.

A skid occurs when it is easier for the wheel to travel sidewise than straight ahead. Since the front wheel runs on nearly frictionless ball-bearings it is evident that if the wheel be turned in the direction of the skid, so that it is easier for it to revolve than to slide, the tendency to skid will be eliminated. However, this method of counteracting a skid is applicable only to the front wheel, as the direction of the rear wheel is not so easily changed.

A consideration of the theory of skidding will show that a skid will occur whenever the wheel loses traction due to any of the following causes: inertia and centrifugal force, most noticeable on curves; the accelerating effect of the engine; the retarding effect of the brake; an uneven road surface, especially on a crowded road, car tracks, and "pure cussedness," which may be a combination of any of the preceding causes. Mr. Shaw is correct in stating that the weight on the rear wheel is twice that on the front wheel, but I differ from him in believing that the greater the

weight will be the tendency to skid. His argument, as I recall it, was that the extra weight over the rear wheel helped to keep it on the road and to avoid slipping.

Theory and Practice.

Those who have ridden tandem machines or who have traveled with much weight on the luggage carrier know that the tendency to skid was greatly increased. Since the weight on the rear wheel is twice that on the front wheel it follows that it is twice as hard to stop or change the direction of the rear wheel when once in motion, while the frictional coefficient between the tire and the road is not altogether proportional to the weight. If it were simply a case of friction between two plain surfaces, then the theoretical law that friction is proportional to the pressure would hold good, but in practice the mud may adhere to the tire and then the decisive factor will be the viscosity of the mud.

Mr. Shaw's comparison of the motorcycle and bicycle, in which he stated that a bicyclist riding up and touching the rear wheel of another machine with his own front wheel would be thrown, is hardly justifiable. His argument points out the stability of the rear wheel in the one case and the susceptibility to outside influences of the front wheel in the other case, but he proves nothing. The case is not one in point. In my opinion the motorcycle is more closely related to the automobile than to the bicycle when it comes to skidding.

Use of Non-Skid Devices.

Experienced automobilists frequently put chains on the rear wheels of their machines when driving over slippery roads, but it is only under exceptional conditions that a car owner will place chains on the front wheels. The reason is obvious; front wheel chains are generally regarded as superfluous. To get back to Mr. Shaw's argument referring to the front wheel of one bicycle striking the rear wheel of another, I would say that he then

has an external force to deal with and that it is nearly always forces inherent in the motorcycle that cause skidding. Moreover, if the front wheel were held as rigidly in the frame and the weight of the second rider were equally distributed between the two wheels it is by no means certain that the bicyclist to fall would be the one whose front wheel touched the other machine's rear wheel.

When Mr. Shaw placed steel non-skid studs on his front wheel he found that it held to the road like a leech. Of course it did, for there was so little tendency for the front tire to skid, even under ordinary conditions, that with the steel non-skid studs the front wheel did not skid at all.

The Spring Fork Problem.

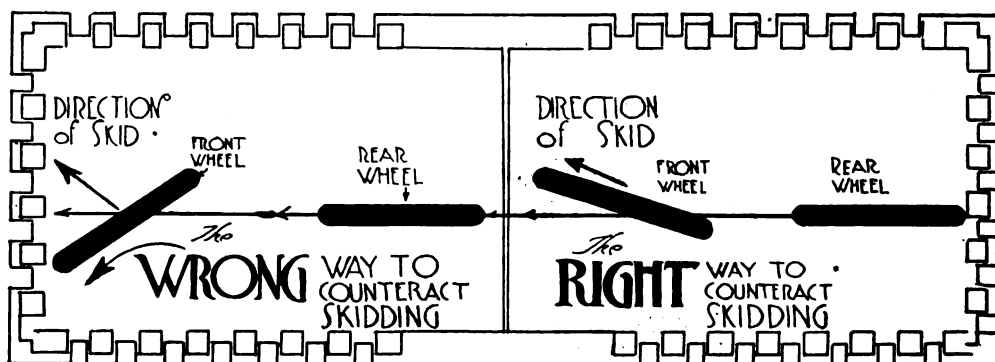
Had Mr. Shaw placed the non-skid studs on the rear wheel it is doubtful if even then the front wheel skids would have been entirely eliminated. Mr. Shaw himself states that when the front tire was equipped with non-skids the rear wheel "did a few fancy steps all to itself," and if he enjoys doing a Gaby Glide on his rear wheel he differs from most riders who I have known.

Another point: Mr. Shaw states that the spring forks cause the front wheel to bounce, but I believe that actual observation will prove that good springs enable the wheel to follow the road more closely than if springs were not used. He also fails to take into consideration the fact that when the pressure against the ground is least the tendency to skid is also at a minimum.

The retarding effect of the brake, especially if it be so strongly applied as to lock the rear wheel, is one of the most prolific causes of rear-wheel skids. It is evident that when the rear wheel is locked it will slide with equal facility in any direction, and the same effect is obtained, only to a less extent, when the brake is not so heavily applied. For this reason the brake should not be applied when passing over a slippery road surface. The machine should

have its speed reduced, if necessary, and then be allowed to coast with the clutch disengaged.

Another, though less important cause of skids, is the uneven pull of the motor; this is most evident in single-cylinder machines but may be minimized by loosening the belt idler or partially disengaging the clutch, if it is a



chain-drive machine. This is an additional reason for coasting over slippery spots, as a spinning rear wheel is likely to skid in any direction. Uneven road surfaces, such as car tracks, etc., should be crossed slowly and as nearly at right angles as possible, especially if wet. Large tires are less likely to skid than small ones, as the greater surface is more likely to find a fairly dry spot to adhere to.

It is mainly to reduce the danger of skidding that it has become the most advanced automobile practice, especially abroad, to attach brakes to the front wheels in spite of the increased cost and complexity involved. For this reason the use of front-wheel brakes on motorcycles would seem to have much to recommend them. Those bicycle riders who used front wheel brakes will remember that they had little skidding trouble, while any motorcycle rider who will lock his rear wheel by the sudden application of his brake is almost sure to skid—decisively and often spectacularly.

ALWAYS MARK PHOTOGRAPHS.

PHOTOGRAPHS submitted for reproduction in *MOTORCYCLE ILLUSTRATED* should always be accompanied by the title of the picture and the full name and address of the sender. This information may be written upon the back of the photograph or embodied in a letter mailed with the photograph. Never mail photographs alone and unmarked. *MOTORCYCLE ILLUSTRATED* welcomes every picture calculated to make an appeal to riders or the trade, and it is regrettable that photographs of highly interesting subjects must occasionally be laid aside because no title accompanies them and their senders are unknown.

TORONTO'S BIG SQUAD.

THE registrar of motorcycle licenses at Toronto, Can., has already issued 1,750 number plates this season and the applications for permits are still pouring in. This number is far in excess of last year.

NOT WITHIN THE LAW.

A QUESTION has arisen in Mississippi as to whether motorcycle owners are required to pay taxes on their machines. When asked if motorcycles came under the provision of the automobile tax law, the attorney general replied that they did not, the law applying only to four-wheeled vehicles, propelled by gas or electricity. The next legislature will probably amend this law to include the motor two-wheelers.

WHERE WEIGHT COUNTS.

WEIGHT plays a greater part in motor racing than in any sport outside of horse racing, say followers of the bowl riders. Eddie Hasha, the Dallas speed marvel, and Arthur Chapple, of New York, two of the best, are examples of this. Chapple is forced to train steadily to keep in racing condition, while Hasha's weight of only 118 pounds counts heavily in his favor.

Buffalonians on eventful Tour

J. Binns Drake

GLOOMY weather prevailed when my partner and I left Buffalo for our tour to Danielson, Conn., but having laid our plans carefully we were not to be daunted by a threatening sky and, as the endurance boys say, we pulled out on schedule time. In the morning we covered about 80 miles, going through Batavia, LeRoy, Caledonia and Avon. Two miles east of Avon we stopped and enjoyed a lunch that we had carried, and a short time later we were under way for Geneva, reaching that place about 4:30. Just outside of Geneva the road was very sandy for two miles and we were called upon to do some pushing. A few spills also added spice to the outing at this juncture.

We reached the Auburn ferry at 5:45, and less than an hour later we had crossed and started on our run to Auburn. Arriving in Syracuse at 8:20, after a detour, we struck a street that had just been heavily oiled and several more spills were added to our list. Our destination for the night was Onondaga Valley, where we were royally entertained by friends.

On the Trail to Utica.

On Sunday we arose at 9 a. m., but it was almost noon when we took to the road. Four miles out of Syracuse my partner's brake holder gave way, breaking his chain and bending the frame and luggage carrier a little. To prove that trouble did not worry us we dropped into an ice cream store, refreshed ourselves and then made repairs on the machine. We pulled into Utica at 5 p. m. and made a sightseeing trip about the city before "turning in." We started at 7 o'clock the next morning and 9 o'clock found us at Little Falls. We made

a good start but, an hour later, sad to state, we were back at the garage again. Thereon hangs an unfortunate tale.

About three miles out of Little Falls we passed a horse and buggy. Jacobs, my partner, rode by without mishap, but as I passed the horse became frightened and swerved to the side of the road, throwing out the occupants of the rig, a young lady, an elderly man and a middle-aged man. The latter had his arm broken in two places, the old gentleman was given a bad shock and the girl was seriously shaken up, although she escaped injury. Realizing that prompt action was needed I jumped into the saddle and set sail for a doctor. At my second stop I located a physician and was on my way back with him when we learned that a doctor had passed the party on the road after I had left and had brought the two men and the girl into town.

The Jaunt to Boston.

After being exonerated from blame and finding that I could be of no further assistance, I started out to locate my partner,



To Boston, Charlestown and New Providence by Way of Albany and Pittsfield—A Lot of Fun in Return for a Very Small Outlay of Money.

who had been too far ahead to witness the accident. I found him on the road leading out of Little Falls. He had seen the horse caught and had returned to the scene of the mix-up, arriving as the doctor appeared. He gave all the assistance possible and when I joined him we headed through Fonda to Amsterdam. Our dinner stop was at Schenectady. Without trouble we reached Albany and the cobblestones encountered there will long be remembered. We reached Pittsfield at 5:30 and after supper obtained a fine view from a neighboring hill.

We pulled out of Pittsfield by a detour, going over some sandy and rutty road. In descending a steep hill my brake refused to hold and I spilled on a turn, but came through without injury. We stopped at Springfield for dinner. In Worcester we stopped for an hour so that Jacobs might visit his Alma Mater, Worcester Poly-Tech. It was 7 p. m. when we arrived in Boston. The trip through the Berkshire hills was one of the best either of us had taken. The road winds up and down and around the hills in most picturesque fashion, but the grades are not bad and any machine in good condition can climb them.

At Charlestown Navy Yard.

We spent a day in the Charlestown navy yard, made a trip through Old Ironsides, and also inspected a large wireless station,

in which we were both deeply interested. For dinner I ordered beans and expected to get something out of the ordinary, but much to my surprise they were about the same as we get at home in cans. In the afternoon we took a boat ride to Nantasket Beach and had a look at the Atlantic ocean. The next morning we left for Providence, R. I., arriving at B. A. Swenson's motorcycle headquarters at 12:30. Swenson gave us a warm welcome. We had dinner at Oakland Beach and then left for Danielson. Between Green and Danielson we struck three miles of sand and some pushing was in order.

About two miles out of Danielson there is a fine swimming pool, known as Kellingly Pond, where Jacobs spent many a pleasant hour in his boyhood. We could not resist the temptation to take a plunge and Jacobs asserted that the old place was as satisfying as ever. Arriving in Danielson we went to the home of my partner's uncle and for several days we made the most of the opportunities for recreation in the vicinity. We returned to Buffalo over the route followed in coming out, except for the run from Providence to Worcester instead of to Boston.

Novel Wireless System.

There was one feature of our trip which was probably distinctly new from a motorcyclist's viewpoint. As we are both telegraphers we perfected a wireless system by using our horns as transmitters, thus avoiding the necessity for shouting whenever we had anything to say on the road. It is surprising how much fun can be knocked out of such an arrangement, and it also has its practical value.

I have prepared a statement of my expenses for the trip, and find that they were as follows: Gasoline, \$2.99; oil, 82 cents; garage service, \$1.50, and parts, 39 cents. This gives a total of \$5.70, a very reasonable outlay, in my estimation, for a trip which gave such big returns in recreation and general interest.

MOTORCYCLE BANDITS.

THREE motorcycle bandits recently attempted to hold up Ethan Grassfield, of St. Joseph, Mo., just outside of Colorado Springs, but Grassfield's auto proved fast enough to permit him to escape.

MOTORCYCLE SCOUTING TRIP

A Search For A Good Fishing Place—Sand Navigation And Diverse Other Tribulations

By G. M. J.

IT all happened because I am something of an enthusiast on the subject of fishing, and because my friend, the Doctor, has also to admit considerable weakness along the same line. Doc doesn't as yet ride a motorcycle, though he is mightily interested. The trouble with him seems to be that he is a chronic worshipper at the shrine of "the conventional," and as it is unfortunately not the conventional thing for physicians in this particular part of the country to avail themselves of the handy little two-wheeler, he cannot quite bring himself to the point of getting one.

"But, Doc," I have often said, "bone-setters in other places ride 'em, and they ought to do it here. Why don't you break the ice, and show all these back-number M. D.'s that they don't know a good thing when they see it. Be a motorcycle missionary among the medical fraternity!"

But Doc always shakes his head, decidedly, yet sadly. Sometimes I suspect that he almost wishes he isn't a doctor, so that he could ride a motorcycle and still not violate those precious Down-East conventions. But I am getting away from my subject, as the dusky-hued monarch remarked when he found himself outsprinting a disloyal follower who

wished to bolo him—and here's where I return.

Doc and I had long planned a raid on the bass of the Hoosatonic River, some miles above Derby, Conn., but something was always coming up with one or the other of us to spoil our plans. Finally we definitely set the day—for about the tenth time—and shook hands on it, under the agreement that whoever backed out on this occasion would have to stand treat for a good dinner. The only question was whether we should try the river or a lake. We knew about the lake, but were strangers to conditions in the river, and we wanted to go where we would be sure to connect with the finny tribe.

"Now, see here," said Doc one evening in his office, as he puffed away at a fragrant Havana, and like a good fellow tossed me his well-filled case, "that river trip is a long one, and if the fishing's poor there, we're stuck in the place for a whole day."

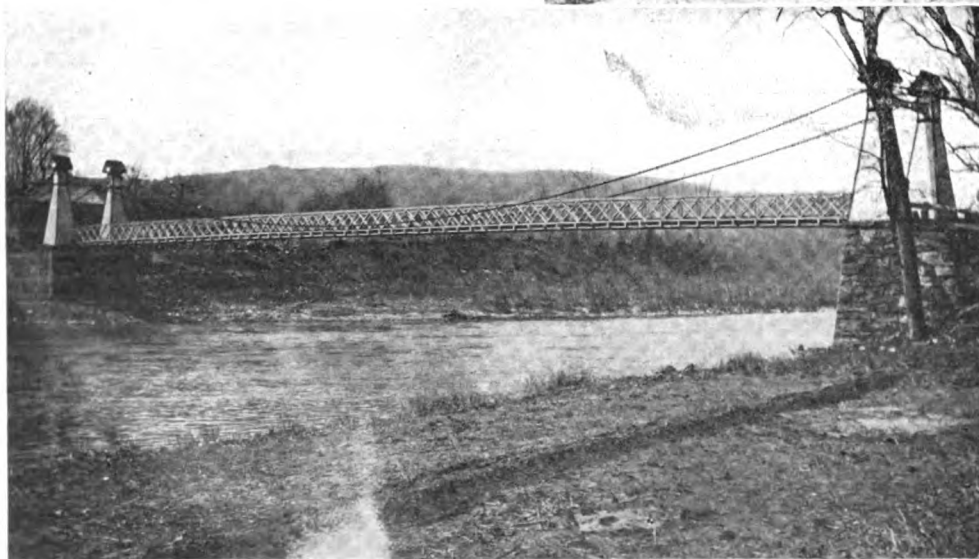
"Righto!" I exclaimed, "and if you'd only buy a motorcycle, we wouldn't have to depend on the beastly jerk-water train. We'd be independent of all time-tables then."

That gave Doc an idea.

"You've talked so much about the motor-



Connecticut Tour—"Some Sand!"
Suspension bridge across the Hoosatonic.



cycle's always making good," he barked at me; "give me a demonstration. Go up the river on your machine and fish it. If the bass bite we can go ahead as per agreement; if you find there's nothing doing, then it's ho for the wind-swept beaches and beautiful coves of the good old lake!" (Doc gets these poetic streaks once in a while) "Bass enough there anyway, but if you tackle the river it'll save us the danger of being most terribly stung. You've got to do it."

"If you put it that way I suppose I have," was my reply. "I'll go up there to-morrow

afternoon on a scouting trip and report in due season."

Thus it was settled.

The next afternoon found me ready to start—fish basket strapped on the luggage carrier of my M-M twin, together with a small net for capturing live bait. Two rods—one fly rod and one for bait—were projecting from the game pocket of my hunting coat.

From New Haven to Derby runs an oiled State road that was once like a highway in paradise—smooth as a billiard table. However, an average of about two autos per minute pass over that road, and what they've done to it is a howling shame. Now it is undulatory and wave-like where the semi-plastic combination of tar and fine crushed stone has been rolled into a series of billows by the action of the big tires. This wave effect is so realistic that one almost feels seasick when riding over it, though that road is really divine compared to what you find after leaving it. My only trouble came when the bait net was jolted adrift, after which I slung the perverse thing over my shoulder.

Derby is a backward town; it is a sort of joke in Connecticut, anyway. Any vaudeville actress who wishes to make a hit with her audience always brings in some crack at Derby, and poor Derby is so used to being the goat that I don't believe it minds the harsh gibes any longer. Well, Derby's main street is built of irregular blocks of stone, and in the whole length of the street there are no two of the same size, shape, or height above what would be the mean road level, if there were any such thing in Derby; instead, the road is mighty mean and not a bit level. Even Satan would scorn to have such a highway through his sulphuric domains. That street is positively the worst I have ever ridden over in any city, village, or town during a motorcycle career that covers four seasons. It is a relic of barbarism, a throw-back from the dark ages. Any of you fellows who have been so unfortunate as to go through Derby know that I speak the truth.

Well, I got by finally, though my spinal column felt as if some one had been hammering it with a pile driver, and I had begun to wonder whether my rims could possibly keep their circular shape under such adverse conditions. Presently I found myself riding up the valley of the Hoosatic. The scenery along the river is really beautiful, but a motorist can only appreciate it by stopping, for the road is so full of ruts and sand—with here and there a stretch of cobble stones thrown in for good measure—that he can only let his eyes wander from the straight and narrow at risk of a spill.

I got along fairly well, though it seemed to me that I was striking considerable sand. Then I discovered what a mistake it was to consider the road that far as sandy, for I suddenly found the place where they make all the sand in the world. In comparison with it, all other sandy stretches would be compelled to hang their heads in hopeless shame. Everyone who is lucky enough to be a motorcycle rider knows what sand—deep sand, I mean, with ruts in it—will do to the equilibrium of his power plant. I had plenty of power, but my wheels got into a rut, and then the front one tried to climb out. That was a very foolish thing to do; any self-respecting front wheel ought to know better than to try to climb out of a rut in deep sand, and I told it so, with emphatic variations. My remarks didn't do a particle of good; too late



LIKES TANDEM RIDING.

THAT tandem riding for long distances is comfortable and safe is the opinion of Mrs. Arthur M. Wieland, who occupied the saddle of a Simplex tandem attachment on a trip from Buffalo to Chicago via Columbus, returning to Buffalo afterwards. The picture shows the Wielands taken at Columbus during the Convention week.

I made a frantic grab for the clutch and missed the knob on the handle. Whereupon the road jumped up and hit me in the face.

After I had spat out a bushel or two of moist sand, I righted the motor, which was quite a task, for she had tried to bury herself in the rut. I had my kodak along, and exposed a film to serve as proof of my contention that the afore-mentioned road is some sandy, and then proceeded on my way, by keeping the motor going at fair speed and slipping the clutch a trifle. Of a verity and in sooth, a clutch is indeed a handy little trinket.

About eight miles above the famous town of Derby a suspension bridge crosses the river—Zoar bridge, it is called—and close by it is a small store where by some mysterious blessing of Providence one can get things to drink. It was just like meeting an oasis in the desert, and I almost looked around for a caravan of fierce-looking Arabs mounted on camels. After I had washed down what sand was still sticking in my breathing tube, and flushed out my cylinder head, so to speak, I inquired about the bass fishing. They told me that if I went about 'steen miles farther up the river I might find a few, provided I had particularly good eyesight.

Thereupon I started again, meeting more sand, with an occasional hill thrown in. But my two-lunger simply snorted up the inclines with never a whimper. One was worse than the others, and just to show my contempt for it, I gave the motor a lot of gas at the half-way point. She went ripping up like a saw through a ripe watermelon, but as we whizzed over the summit I perceived something that caused me to jam on the brakes in a hurry. Before me, and reaching clear across the road, was a deep ditch; Heaven alone knows what it was doing there. My momentum was too great to check and I crashed into that yawning chasm, which fitted

my front wheel as neatly as a No. 2¾ pink satin slipper fits a No. 3½ foot.

"Good night, forks!" I cried in horror, and as a mocking echo to my plaintive wail came a vicious snap. Something had gone, but I felt thankful that the whole frame had not caved in, so hard did I hit that wretched hole. A quick examination showed the two top leaves of my spring fork broken off, for while spring forks will stand a good deal, they have their limits. By good luck it was no serious damage, and the forks would hold all right if I didn't try any more fancy stunts. From then on you may be sure I was careful about hitting the bumps.

After the fork adventure I met more sand, always with two deep ruts leading through it. I rode with both feet spread out—like a knock-kneed clothes pin—kicking the ground on each side as occasion demanded, and by that unique and graceful method succeeded in keeping an even keel. Whenever I did happen to get stalled, it was simple enough to escape from the difficulty by using the clutch; getting through there without one would have been a task to frighten even Hercules himself. The fact that I got along so well simply proves that the modern motorcycle can go practically anywhere.

Finally I stopped riding and turned my attention to the bass, first securing a good supply of bait. As this is not so much an account of a fishing trip as of a motorcycle run, I will pass lightly over my attempts to coax the small mouths from the cool recesses of the river. Suffice it to say that they were exceedingly coy about being coaxed. I started back about 6:30, for I wasn't any too keen to ride that river road by night, but on the return trip was so used to it that I left the saddle only twice—once at the store for more liquid nourishment, of which I was in sad need, and once at Derby to light up.

Doc and I went fishing a day later, but we turned our steps towards the lake, satisfied to let the river alone. My report entirely convinced the genial M. D. that to go up the Hoosatic at that particular time was worse than useless, for my experience, combined with what the natives had told me, went to show that the bass fishing in the river was most decidedly N. G. And it was the motorcycle that saves us a fruitless excursion. All of which gives me one more strong argument to throw at my medical comrade in favor of the handy little vehicle that always makes good.

ANNOYING REGULATIONS.

BECAUSE they did not care to placate the feelings of the customs officials at Toronto, Canada, with a deposit of \$75 as prescribed by the Dominion regulations, Mr. and Mrs. J. Harold Jones, motorcycle tourists of Utica, N. Y., were compelled to abandon a trip through the Province of Ontario on August 22 last.

The couple left their home two days before on an Indian seven, upon which practically every convenience necessary for a trip had been placed. A steamer carried the tourists across Lake Ontario to Toronto, where they were stopped and really "deported" although they were respectable citizens. The incident thoroughly disheartened the couple, who had considerable to say about Canadian restrictions that was not exactly flattering. Mr. and Mrs. Jones immediately took another steamer for Ontario Beach, N. Y., in order to take a tour through their native State.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



THAT motorcyclists are taking deep interest in the Improvement Contest now being conducted in these columns, is evinced by the numerous suggestions received daily. Most of them are essentially practical, and all are worthy of close attention by those who are devotees of the two-wheeler. The third series of suggestions is published herewith. The conditions of the Contest are reprinted below for the benefit of those who have not read the original announcement in *MOTORCYCLE ILLUSTRATED*.

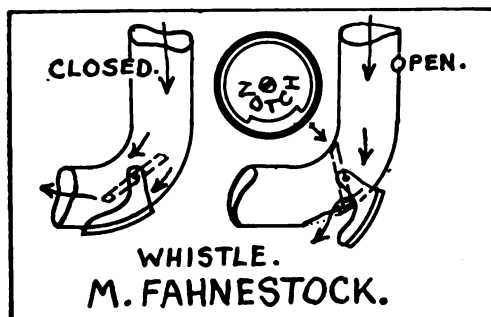
CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

IMPROVEMENT IDEAS DESCRIBED AND ILLUSTRATED

EXHAUST CONSTRUCTION.



A PERMANENTLY fitted exhaust horn is to be formed in the exhaust-pipe, by cutting a slot or port at the elbow as shown and fitting a cover and butterfly valve. These are operated simultaneously by suitable means by the rider. When the "horn" is closed, the cover fits over the port and the valve allows a passage of the gases direct to the muffler, but when it is desired to use the whistle, the cover is swung around and the valve cuts off the passage to the muffler, forcing the gases to pass through the notch in the valve, and out through the port. The gases impinging on the edge of the port produce a whistling sound. Inset shows the shape of the butterfly valve. Contributed by Murry Fahnestock, Allegheny, Pa.

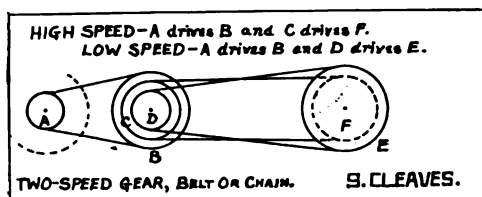
THE Philadelphia police department has purchased forty-nine more motorcycles.

GAS TANK LOCATION.

IN place of the tool-box between rear mudguard and seat mast, place Prest-O-Lite or other gas tank in that space, strapping it to seat mast. Connect outlet by union coupling to a 1/8-inch copper pipe with leads to tail and head lights, fitting valves and nipples to control lights. Tubing goes under mudguard at rear and along top tube to front light. Tank will be turned on at all times, and opened at valves for gas. The connections would be permanent. Contributed by Chas. P. Clarke, Bakersfield, Cal.

TWO-SPEED GEAR.

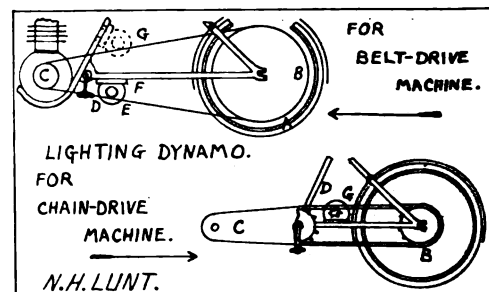
A SIMPLE two-speed gear of the compound type is here shown. Chain drive is used, and the countershaft has two sprockets, both loose on it, but either of which can be clutched by suitable means. The rear wheel has also two sprockets driven by separate chains from those on the counter shaft. The speed ratios depend on the teeth in each set of sprockets. For the high speed, A drives B and C drives F. For the low speed, A drives B and D drives E. The two chain drives may be on opposite



sides of the wheel if desired. Belts may be used instead of chains. This form of transmission should be used with footboards, starting crank and band-brakes. Contributed by S. Cleaves, Cambridge, Mass.

LIGHTING GENERATOR.

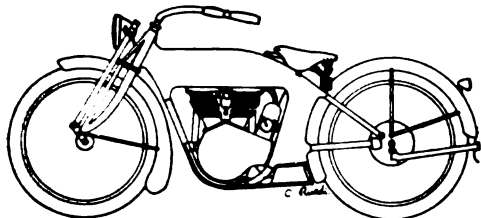
A GENERATOR for lighting, constructed on dynamo lines could be fitted to any machine with chain or belt drive. For belt machines, the dynamo is fitted at E and carries on its shaft a pulley D which is driven by the



flat belt, which latter runs over pulleys B and C. A fixture F permits the dynamo to slide back and forth to put it out of or in action. At G is an alternative position of the dynamo, attached to the seat mast tube. For a chain-drive machine, the dynamo is mounted on the rear stay, slidably as before, and has a sprocket C which is driven by the drive chain as shown. Contributed by N. H. Lunt, Dover, N. H.

GENERAL CONSTRUCTION.

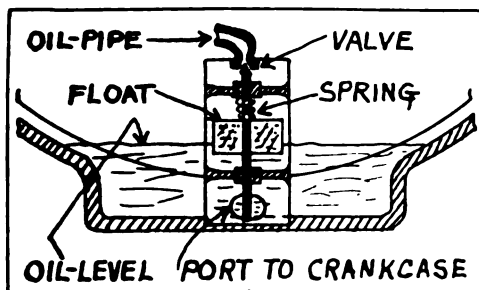
A MOTORCYCLE design embodying the tank-in-frame construction and unit power plant, incorporating a two-speed gear, is suggested. The upper or tank members of the frame are of aluminum alloy and incorporate the tool-box and fuel tank, while the



rear member holds the oil and lighting outfit, which is a generator and battery equipment. Final drive is by shaft, and the generator is driven from this shaft. Foot-boards are fitted and pedals operate the band-brakes and idler wheels. Four twisting grips; one each for spark, throttle, clutch and gear operation, are fitted. Contributed by C. Ruedi, Berkeley, Cal.

AUTOMATIC OILER.

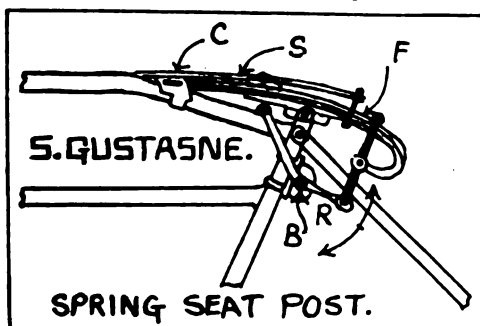
THIS oiler keeps the level in the crankcase the same at all times, its action being that of a float in a carburetor. The oiler communicates with the crankcase by a port in its bot-



tom, and has the needle valve guided. The light spring keeps the valve off its seat and is only forced upwards by the level of the oil acting on the float. The oiler is to be fitted on the side of the crankcase. Contributed by W. A. Rettig, Garrett, Ind.

SPRING SEAT PILLAR.

A COACH-SPRING used for carrying the saddle is here shown. A rocker R is pivoted to a fixture B on the seat mast tube and to the rear or free end is fitted the linkage characteristic of the coach type fork. F is the main spring, S the fixture for the seat and C a clamp for attaching to the top tube. The



operation is similar to that of the corresponding type of spring fork. Contributed by S. Gustasne, Orient, Iowa.

HINGED MUDGUARD.

HINGED mudguard, chain guards, and fuller equipment. For convenience in tire and rear wheel repairing, the mud-

guard should be hinged, so as to enable the wheel to be drawn right out instead of having to lift the whole machine upwards. After riding in mud or dirt, the rider's clothing is generally soiled by leaking oil combined with the dirt, but if the chains were fully guarded, this would not be the case. The use of these guards would enable the chains to run in an oil bath, and also keep the tire, spokes, rim, etc., from collecting oil.

With the present arrangement of clutch lever on the left and spark grip on the right, the throttle grip is on the wrong side, if the clutch is to be operated properly in sand or other heavy going. The lever should be put on the right-hand side where the throttle could be operated without reaching over with the right hand. Or the present arrangement, with the throttle on the right-hand grip and the spark on the left-hand grip, would be good also. A full equipment, following the practice in automobile circles would be desirable. This to consist of a good horn, speedometer or odometer, lamp and generator or gas tank, magneto cut-out, luggage-carrier with a good board top and resting on springs are suggested as articles of a first-class equipment. This equipment is to be optional to the purchaser. Contributed by C. E. Parker, Dunbar, Penna.

VARIOUS SUGGESTIONS.

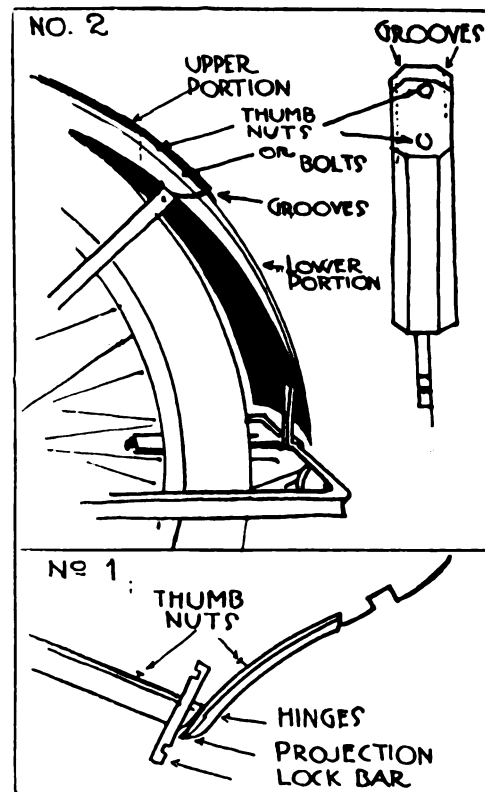
A COIL spring to lift the stand and latch it is desirable for the rider, as are also the fitting of priming cocks and piping from gasoline tank to cocks. Guards against mud and water should be fitted over the motor pulley or sprocket, fastening by bolts and brace to the crankcase. Filler caps should have chains attached to prevent being lost or dirtied by laying down. Tail-pipe to be fitted to muffler to carry the exhaust beyond the rear wheel. More clearance for magneto, to obviate oil running on it from the gear case and for fording streams. Contributed by S. R. Brene-man, Lanark, Ill.

BACK FROM 1,000-MILE TRIP.

BALTIMORE, Md., September 2.—Roger Wilkens and F. E. Rasmers have just returned from a journey of 1,000 miles on their motorcycles. They were gone for two weeks. The boys hit out for Springfield, Mass., as their ultimate destination and they made it in good time, traveling sometimes at the rate of 58 miles an hour and traversing almost 200 mile in one day. They did not hurry themselves on the trip northward, stopping to enjoy canoeing in the Delaware river and for a dip in the ocean at Atlantic City. With the exception of using ferries when necessary and the trip from this city to Philadelphia the two men traveled the entire distance on their motorcycles. They went from here to Philadelphia and returned by boat, the roads being in such condition that they did not care to tackle them.

President Frank Boyd, of the Maryland M. C., is another tourist who has just returned from a long hike awheel through New England, New York and New Jersey. Before coming home he dropped off at Atlantic City and enjoyed a good rest.

MEMBERS of the Capital City Motorcycle Club, of Little Rock, Ark., recently made a run to Mount Nebo, Ark., a distance of 100 miles.



Folding Mudguard. B. T. Ellis, of Baltimore.

BUILDING NEEDED AT ONCE.

REALIZING that there is no time to be lost in connection with plans for handling the 1913 output the officials of the Minneapolis Motorcycle Company have decided that they must have a building ready for occupancy instead of waiting for the erection of a new structure, and they are now working along those lines. It was announced some time ago that the company would house its plant in a new structure in order to facilitate the manufacture of machines for the coming season, but is now believed that suitable accommodations can be obtained for the present in a four-story structure which is available in the south-eastern section of the city.

NEW BOWL IN ST. LOUIS.

ST. LOUIS (Mo.) speed fans took a new lease on life on August 31 when the new \$20,000 motordrome was officially opened, and there are indications that the racing game will be well supported in that city. The new bowl has been erected at an angle of 62 degrees, and it will be necessary for the riders to maintain a speed of about a mile a minute in order to hold a place on the incline.

BOOSTING 1913 ORDERS.

BALTIMORE, Md.—The motorcycle business in this State will be better the coming season that it was during the last. Howard A. French & Co. have already entered an order with the Hendee Company for 500 machines of the 1913 output. Last year this firm disposed of 300 machines in Maryland and the District of Columbia.

TIEMEYER SHOWS CLASS.

BALTIMORE, Md.—Freddie Tiemeyer continues to show his class as the premier rider of Maryland. He went down to Salisbury, Md., last week and entered the four motorcycle races run in connection with the annual fair. There was nothing to it but Tiemeyer and he showed the dust to the field in the four races carded.

QUESTIONS and ANSWERS

ANSWERS to Question No. 3, the operation of a high-tension magneto, were not very numerous, and this is surprising inasmuch as the majority of riders have magneto ignition fitted. The question related to the operation only, and the first prize is awarded to A. F. Clement, 204 East Franklin street, Mansfield, La. The second prize goes to David Kuskin, 764 East 161st street, New York, N. Y.

Many of the replies gave more attention to the construction of a magneto and correspondingly neglected the operation. The Editor of the Questions and Answers Department must again caution contributors against saying too much, and repeat that they adhere strictly to the subject given. The answers to Question No. 5, given below, will be published in the October 3 issue.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the second issue following the number in which each question is asked. For example, answers to question Number 4, published in the August 22 issue, will be printed in the September 19 issue. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York."

Question No. 4. What is a flywheel and what are its functions.

Question No. 5. Suggest means for improving the typical control system.

FRANK

MERRITT

HIGH-TENSION MAGNETO.

IN awarding the prizes for the answer to Question No. 3, the operation of a high-tension magneto, the winning answer was judged that of A. F. Clement, 204 East Franklin street, Mansfield, La., and the second prize was awarded to David Kuskin, 764 East One Hundred and Sixty-first street, New York City. The reply given by Clement is excellent, answering the question as it was given, and is printed below:

In the operation of a high-tension magneto, as the current leaves the armature it is offered two paths: the shorter, through the interrupter to ground, and the longer, through the primary of the induction coil on the armature to ground. A third path through the condenser is only apparently available; it is obstructed by the refusal of the condenser to permit the passage of the current, as the condenser merely absorbs a certain amount of current at the proper moment, i. e. at the instant of the opening of the interrupter. The interrupter being closed the greater part of the time, allows the primary current to avail itself of the short path it offers.

At the instant at which the greatest current intensity exists in the armature (when the latter is nearly horizontal), the interrupter is opened mechanically so that the primary current has no choice but must take its path through the primary of the induction coil. A certain amount of current is at this instant absorbed by the condenser. This sudden rush of current into the primary induces a high-tension current in the secondary winding which has sufficient pressure to bridge the gap

of the spark plug. The sharper the rush of current into the primary winding the more easily will the necessary intensity of current for a jump spark be induced in the secondary winding.

The distribution of the current in proper sequence to the cylinders is accomplished as follows: The high-tension current in the secondary winding is delivered to a distributing brush carrier that rotates in the magneto at half the speed of the engine crankshaft. This brush carries slides over insulated metal segments, there being one for each cylinder. Each of these segments connects with one of the terminal sockets that are connected by cable with the spark plugs. On single and two-cylinder magnetos, the segments are on an extension of the armature and the brush or brushes in the casing, and the magneto is driven at half the speed of the engine crankshaft. At the instant of interruption, of the primary current, the brush is in contact with one of the metal segments and so completes a circuit with the spark plug connected with that segment.

Should the circuit between the terminal and its spark plug be broken, or the resistance of the plug be too great to permit a spark to jump, the current might rise to an intensity sufficient to destroy the induction coil. To prevent this a safety spark gap is introduced, which allows the current to rise only to a certain maximum, after which discharges will take place across this gap.

Second Prize Winner.

Kuskin's answer was as follows:

A high-tension magneto consists of three important parts: 1, the magneto; 2, the armature; and 3, the commutator. The magnets are permanent horseshoe or U-shaped, usually in pairs, with like poles together and having pole pieces so that magnetism can be converted into dynamic electricity when the armature is rotated within the pole pieces. The armature has two windings, a primary and a secondary, each with an end in common, with their other ends connected to the timing device and to a segment which revolves with the armature. The commutator carries the segment and has fixed brushes which are connected to the spark plugs.

With the armature up and down, no voltage is produced, but when turned to a horizontal position through a quarter-revolution, the voltage is at its maximum, decreasing to zero when the armature is again up and down. During the next half-revolution, the voltage rises from zero to a maximum and falls again to zero. Thus electricity is generated every half-revolution but the current is reversed, and thus alternates.

The current is primary in the primary circuit and passing through this winding induces a secondary current which goes to the plugs. The path is from the end of the high-tension winding to the segment, then through the brush on the commutator and over the wire to the end of the spark plug. The high-tension current is necessary to overcome the resistance of the gap between the points of the spark plug, and the current jumps this gap and fires the explosive charge which is the propelling power of the motor.

MOTORCYCLE VS. INSURANCE.

PINCUS JEWELL.—A fire insurance policy usually has one or more clauses therein stating that the storage of gasoline, or like inflammable or explosive liquids, is or is not forbidden under the terms of the said policy, and it appears that with the motorcycle stored in the rear of the establishment, you would be in a position of storing gasoline, the gasoline being in the tank of the machine. Drygoods stores usually have policies that forbid the storage of any inflammable material whatsoever, without, of course, having a special clause inserted to permit of the use and storage of gasoline, etc., as when conducting a cleaning department. Lacking such clause, if a fire occurred, and the motorcycle was on the premises at the time, the insurance company might be justified in refusing to pay the insurance, on the ground that the risk of having the motorcycle on the premises nullified the policy by being an added risk, or even that the fire was caused by the motorcycle itself.

Unless you come to an agreement with your insurance company, we strongly advise your storing the machine elsewhere, as you stand to lose the amount of insurance in toto, as given above. We doubt whether the company would consent to have the machine on the premises even, except upon payment of a big additional premium. The nature of the goods would make the risk too great.

SHORT STROKE MOTORS.

FRED LARKE.—The Merkel 7 h. twin motor is of the short stroke type, the bore being 3.45 inches and the stroke $3\frac{1}{4}$ inches. This is true also of the 4 h. single of the same make. Among the "square" motors (in which the bore and stroke are equal) are the Waverley 4 h. single, the 6 h. twin Merkel, the 5 h. Minneapolis and the $6\frac{1}{2}$ h. twin J. A. P. The latter is a racing type; see the answer to L. W. Gibson in this issue.

A racing motor does not necessarily have a short stroke; most of them are "square." Almost any good speedy stock motor can be converted or made faster by drilling pistons and rods, porting the cylinders, fitting different cams, re-timing and re-balancing. But motors so treated, and also those for speed only, are not to be recommended for general purposes; being lightened they would not have the life under wear and tear that the stock motor has, and would soon be disabled. Slow running would be almost impossible, and the fuel consumption away up. The same might be said about oil. A ported motor quite frequently takes sand, etc., through the ports, with results better imagined than described.

RACER QUERY.

L. W. GIBSON.—The J. A. P. motor ridden by John J. Cox, at Brighton Beach track is a $6\frac{1}{2}$ h. p., 45 deg. twin, with a bore and stroke of $3\frac{11}{32}$ inches each. It is fitted with five cooling flanges per cylinder, three being on the removable head and two on the body. The valves are overhead and the motor is ported. The frame was made up by James Baxter of Edinburgh, Scotland. Control is by lifter, short-circuiting switch and sparkgrip, the throttle being worked at the carburetor direct.

BALANCING AND PORTING.

McL. SAWYER.—Have the connecting rods of equal weight and the pistons the same, as at present. Drill pistons on the tail, again weighing them and seeing that they

are equal in weight. If desired, drill the connecting rods through the web, keeping the weights the same. Rest the flywheels, connecting rods and pistons connected up on knife-edges by the cranks, allowing the one of the rods and its piston to hang vertically and the other horizontally. If the flywheels tend to rotate drill them until they just balance on the knife-edges. We advise your sending the motor to the makers for any careful balancing, however. They can do it better than the average shop-man. The ports should be exposed about $\frac{3}{8}$ of an inch before the piston reaches its down dead-center. Time the exhaust valve to open about at the point on the stroke where the ports are half open, if the cams will allow of this.

MOTORCYCLE BUGGY.

R. G. PATTISON.—We do not think it probable that any motorcycle manufacturer would market a buggy made up of two motorcycles side-by-side with a body between. For one thing, it would be almost impossible to get the two motors to run alike and the whole vehicle would tend to move toward the side having the slower or less powerful motor. If, when at speed, one of the motors slowed down or stopped, a disastrous accident would probably result. For this reason alone, you would find it difficult to persuade a manufacturer to build such a vehicle. Its appearance would also be against it. A vehicle along similar lines was built abroad two years ago, but both rear wheels were driven from a single motor, of two-cylinders rated at 8 horsepower. It was little more than a freak and never could have been a commercial success.

ENGLISH MACHINES.

A. BLUSSON.—1, the Douglas and Scott machines are not represented in this country. The addresses of the makers are: Douglas Brothers, Kingswood, Bristol, England; Scott Engineering Company, Mornington Works, Bradford, England. 2, The cost for the $2\frac{3}{4}$ Douglas would be close to \$385 at New York or other Atlantic port, and the cost of the Scott about \$460. 3, *The Motorcycle*, 20 Tudor street, London, and *Motorcycling*, 7 Rosebery avenue, London, are the principal motorcycle publications in England. *Radwelt*, Berlin, Germany, is the chief German publication. At present, there is no French journal devoted to motorcycling.



TRANS-CONTINENTALIST M. E. Gale, who forwards the above photo of Mrs. Gale and their Emblem machine, writes: "You don't have to leave the main roads to find lakes in Colorado."

TO BENTON HARBOR, MICH.

CONSTANT READERS (Pa.)—From Palmyra go direct to Harrisburg via Hummelstown, Rutherford and Paxtang. From Harrisburg take our route number 56 to Altoona. From Altoona go on to Pittsburgh via Allegheny Furnace, Eldorado Stiffler, Duncanville, Summit, Cresson, Ebensburg, Bel-sano, Strongstown, Indiana, West Lebanon, Shady Plain, Apollo, Hyde Park, Leechburg, Schenley, Freeport, Ingleside, Karns, Peters, Bouquet, Springdale, Cheswick, Denny, Sumner, Etna, Willow Grove, Allegheny City.

From Pittsburgh take route 145 to Cleveland, Ohio; then 104 to Toledo. From Toledo take route 125 to South Bend, Ind., and from South Bend take roads as follows: South Bend, Bertrand, Niles, Berrien Station, Royalton, St. Joseph, and Benton Harbor. The route numbers refer to routes in our Touring Number.

HAS BEEN USED BEFORE.

DAVID KUSKIN.—Your idea of individual belt and chain drives for different speeds or alternately has been tried out on a well-known British machine, but never came into much prominence. The double-chain system, one for each speed as on the Clyno, has superseded it.

CHAIN-BELT QUERY.

BERNARD J. LOGUE.—Write the Whitney Mfg. Company, Hartford, Conn., or the Majestic Mfg. Company, Worcester, Mass. We doubt if you can get such a transmission strong enough for your purposes.

BIG LANTERN PARADE.

AT its meeting, on August 29, the Indianapolis Motorcycle Club decided to give a big lantern parade which is to end with a banquet, sometime within the next two weeks. The board of directors was unable to give a definite report in regard to securing a clubhouse. However, those on the committee state that three good locations are being considered, and that it is very probable that quarters will be secured in a few days.

There was much interest in the 100-mile race that the club and the Indiana Racing Association is going to stage on Saturday, September 14. All the members promised their support for the venture.

Ray Hoffstatter has returned from New York, where he raced several times at Brighton Beach. Ray is a professional now, but is planning to compete in the 100-mile race here on his Merkel. Hoffstatter says he just wants to ride in the race and have a chance to break the professional record for dirt tracks. Under these conditions it is expected that Referee Kinney will permit him to ride on the track while the big race for amateurs is on.

DOVER CARD WELL RECEIVED.

C. R. BURBANKS, of New York City, thrilled a big crowd of race fans at Granite State Park, Dover, N. H., on August 24, when he turned off a mile on the dirt track in 55 seconds. This is the best time ever hung up for the course. Six races made up the card, and in each event the boys managed to put up an exhibition that won them cheers.

MOTORCYCLISTS in Trinidad, Col., have organized the Trinidad, M. C., and steps have been taken to affiliate with the F. A. M.

Keeping the BELT at its Best

How Frequent Cleanings Insure Maximum Mileage and Save the Rider Road Worry and Dollars.

GEORGE M. JOHNSON

THERE is a right way and a wrong way with almost everything, no matter whether it is driving a horse or hoeing potatoes. Sometimes to follow out the wrong method results merely in a lot of extra work and loss of time; in other cases it may mean actual financial loss. This last is above all true of motorcycles. A motorcycle requires more or less care and attention if it is to continue to deliver faithfully the exacting service expected of it. The motor itself, as the heart of the machine, will naturally suffer more quickly than any other part from abuse or neglect, but next to this, particularly in case of a belt-driven machine, the transmission must receive at least a moderate degree of care, or the belt will give constant trouble and be worn out before its time.

The Heavy Strain on a Belt.

The belt which drives a motorcycle has a pretty hard life of it. Just consider what it has to do, and under what conditions it works. It is traveling at an enormous speed, is crowded around a small pulley under fearful pressure, and little particles

of crushed stone are continually flying up from the road to be squeezed into the belt by the pressure of the pulley faces or lagging. Add to this the fact that the motorcycle may be used during a rain storm or on muddy roads where water, carrying fine sand, is constantly splashing over the belt, and it is not very difficult to realize why one occasionally goes

wrong, especially if the rider neglects to do anything to prevent it.

There are belts and belts. In my four years' experience as a rider of this type of machine I have made the acquaintance of both good and bad; but I have discovered that a reasonable amount of care is good for bad belts and not bad for good belts. It makes no difference whether your belt is flat or V; you must treat it decently if it is to deliver the goods. The wonder to me is, not that the motorcycle belt sometimes fails to give what is considered satisfactory service, but that it gives even fair service under such adverse conditions.

Leather Belt for Long Life.

There is one V belt that requires very little attention, and for that reason I should consider it quite desirable were it not for one defect. I am referring to the vulcanized rubber and canvas belt so popular a season or two ago. This belt never seems to need cleaning, it grips the pulley like a bulldog, seldom slipping noticeably even though quite slack, and has to be tightened only at infrequent intervals. So far so good; but the life of the rubber belt is at best a short one. From one thousand to fifteen hundred miles is about all one can expect—from my experience, at least—and that is too small a mileage figure for the price of the belt. The trouble is that this belt is built on the wrong principle. When it is forced around the small drive pulley, the outside stretches, while the inside buckles, which process tends to force apart the canvas and rubber. The latter peels away from the side—and then a new belt.

The leather V belt as now made gives more satisfactory service. To be sure, it does not grip quite so well as the rubber, especially when wet, and therefore must be run tighter, but it lasts longer. It does, however, require regular attention. In the first place, the sides of the belt, where pressed against the pulley faces, often take on a hard gloss or polish which destroys the gripping power. This is formed mostly of small particles of dirt and road material which combine with a little oil from the engine or dressing from the belt to form the hard surface. This does more than merely rob the belt of its gripping power; if the scale is not removed, it has a fearful effect on the pulley faces, quickly grinding

them out of the correct angle of 28 degs., which is another very strong reason why attention should be given at the right time. To fit a new belt to a pulley with badly ground out faces is to shorten by half or even more the life of your new belt.

Pointers on Cleaning.

This scale may be removed by aid of a very dull knife—one at all sharp is likely to cut and mar the belt—and if the rider is in a hurry it may be done without taking the belt from the machine. I have often stopped to do it on the road, when I found my belt slipping, even though tight enough to transmit the power in good shape. That, however, is only a temporary arrangement, and once in so often—say every five hundred miles, or oftener if the leather needs it—the belt should be removed from the machine and thoroughly cleaned.

Scrape it very carefully, being sure to dig out every tiny bit of crushed stone that may be sunk into the leather; and you will be surprised to find how many of these there are. Then clean out thoroughly around the little blocks on the under side, which allow for that buckle effect as the belt is crowded around the small pulley. You will probably find a big supply of dirt collected here. After the scraping operation is completed it is a good plan to rub the belt with a woolen cloth. Use plenty of elbow grease, and you will remove a lot more dirt; never clean a belt with gasoline, as that is very detrimental to the leather, and bad practice.



Neats-Foot Oil as Dressing.

If the belt is riveted—and most leather V belts are—with large washers on top to prevent the belt from sinking too far between the pulley faces, you should take a look at the condition of these rivets and washers. You may find some of the latter missing, or about to fly off, and if so, replace those that have departed and anchor the others more firmly by a few light taps of a hammer. Next it is time to dress the belt with some good preparation that will keep it soft and pliable.

There are a good many belt dressings and leather preservatives on the market, and they may be all right—I cannot say, since I have tried none of them. But I do know that neats-foot oil is all right, and I know that certain belt makers recommend it. I have used neats-foot oil many times on hunting boots and on my motorcycle belts, and have been entirely satisfied at the results. Applying the oil is rather a messy job, but no motorcyclist should mind a trifle like that. Coil the belt up in a flat basin or pan, and pour at least a pint of the oil—a quart is better—over it. Tip the pan this way and that, so that the oil can run all over the belt, in and around the blocks or interstices, as the case may be. After it has soaked awhile, turn the belt over, and give the other side a chance. It is not a bad plan to let the belt remain over night in the oil bath.

Belt Must Be Pliable.

When it has soaked long enough, hang it up over the pan to drain off the superfluous oil, which can then be put away for use the next time. Get busy with your hands and rub the oil into the leather by twisting and turning the belt. You will soon notice that it is far more pliable than before treatment. Then rub off all the oil you can with rags or cotton waste, and your work is done. At first you may find that the belt slips unduly because of the oil squeezed out on the pulley, for leather soaks up a good quantity of neats-foot, but this lasts only a day or so. You will be well repaid for your trouble by having a belt that drives better and lasts longer than if you had neglected it.

A flat belt requires treatment of this kind just as much as a V, though not so often. Yet where a flat belt is used with hand idler in lieu of a free engine clutch there is extra need of care, for the slipping belt is burned and polished by the friction. The driving surface of a belt should never feel harsh and dry, but should be slightly greasy to the touch; never use a belt—flat or V—when it is dry—that is, when the oil or dressing has all been burned out of the leather. In such a condition it will crack and break very quickly and soon be ruined beyond hope of repair.

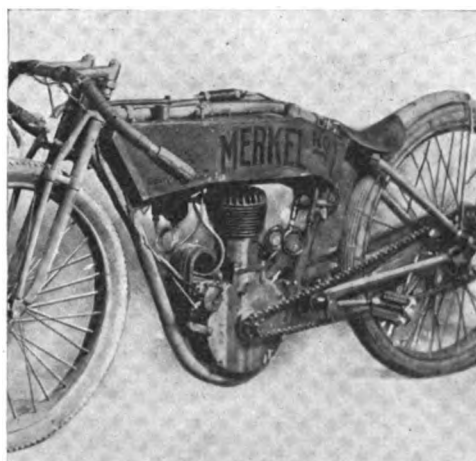
An Extreme Case.

The flat belt should always be cleaned and dressed after being wet. If the machine is driven during a hard rain or over very wet roads, a good deal of water will get on the belt. After the ride the belt should be carefully scraped as described for the V belt, until all particles of sand and gravel are removed. If the belt is in very bad shape it will be well nigh impossible to do this without some preliminary treatment.

Not long ago I undertook the worst ride of my experience—sixty-five miles of mud and water from four inches to a foot in depth. Next morning I started in to clean up, and found the belt in fearful shape. It was as hard as a board, and its surface would have made a fine rasp—simply covered with sand and gravel sunk into the leather. I tried to scrape it, but there was absolutely nothing doing. Then I removed the belt and gave it a good soaking in neats-foot oil; that softened the leather until I had no more trouble in scraping out all the bits of embedded stone. I next gave another dose of neats-foot, and allowed it plenty of time to soak in. To finish the job I let the belt drain; thereupon wiped it as dry as possible, and now the belt is just as pliable as when new; but had I attempted to use it with no attention after that ride it would surely have been ruined.

A SPEEDY MOTOR-COP.

SOME time ago Webb Redner, a motorcycle officer in Kansas City, Mo., decided to transform his rigid-frame Merkel machine into a racer in order to put a crimp in the opera-



tions of speeding automobilists in his district, and the outcome is the machine shown in the accompanying photograph. Redner has fitted a model H Heitger carburetor of the racing type and made other changes in his mount, with the result that few speed fiends manage to elude him. He has brought in enough money in fines to pay his salary for sometime past. The photograph is forwarded by E. J. Cortines, agent for Merkel machines in Waco, Texas.

LONG TRIP FOR WITMER.

LONG distance riding is more and more being indulged in, and Claude Witmer, of South Bend, Ind., is a recent convert to the habit but by no means a dabbler. He left South Bend on August 11 and will cover 6,000 miles of roads, including the following cities in his itinerary: New York, Chicago, Omaha, Lincoln, Neb., Denver, Salt Lake City, Spokane, Seattle, San Francisco and Los Angeles. The roads encountered will satisfy the most ardent road-driver as regards experience, including mountain, desert, mud, etc.

A YOUNG business man of Waco, Tex., a motorcycle enthusiast, recently rode his motorcycle on an annual trade "boosting" trip of the Young Men's Club of the Board of Commerce. And with his motorcycle he kept constantly ahead of the special train carrying other "boosters."

McBRIDE'S RECORD.

IN spite of the fact that he was greatly held back by the lack of deliveries last spring, Percy A. McBride, the popular Toronto salesman, has enjoyed a great run of business this year. "Mac" had sold over one hundred motorcycles on August 1, seventy-five of which were the Excelsior brand. Fifteen more sales were Pope machines and ten were Motosacoche.

A recent big order which McBride secured was from the Hydro-Electric Commission for six Excelsiors. Four or five different makes had been tried out by the Commission, but the Excelsior was finally chosen as the standard equipment of the department.

Harold Cole, the young Canadian racing star, is now a free lance, having left McBride's employ. Cole expects to go to Chicago to take up employment in the Excelsior factory unless some other agent signs him up for racing.

A MOTORCYCLE HONEYMOON.

NOTHING is more romantic than a motorcycle honeymoon trip, according to Mr. and Mrs. Clinton Johnson, who just completed a 1,500-mile journey from Topeka, Kan., to El Paso, Tex.

CITY officials of Beloit, Wis., are opening a campaign to fine motorcyclists who ride with their mufflers open.

MOTORCYCLES are to be adopted for the use of officers in the government forest reserves in California.

SHERIFF MISCHKE, of La Salle county, Ill., has adopted a motorcycle for use in apprehending all classes of criminals.

THE Brockton, Mass., Motorcycle Club recently conducted a successful Sunday afternoon run over 138 miles of sea coast road.

ARCHIE OLBERG and Ed Schwalbe, of La Cross, Wis., recently toured to Fremont, Neb., and return, a distance of 1,500 miles, in six days.

WILLIAM KAPPMEYER, of Aberdeen, S. D., is making a trip on his motorcycle, to Alton, Ill., and return, a distance of 2,500 miles.

MEMBERS of the Rochester (N. Y.) Motorcycle Club recently made a trip to Hammondsport and the Curtiss aviation field, where they were entertained by Glenn Curtiss.

THE plumbing inspector of Terre Haute, Ind., makes his rounds on a motorcycle.

MR. and Mrs. Samuel Switzer have completed a trip from Moline, Ill., to Minneapolis, Minn., on a tandem motorcycle, a distance of 750 miles.

THE members of the local motorcycle club, of Porterville, Cal., headed by President Shortman, recently toured to Tule River.

GEORGE M. FULLER, of Long Beach and Miss Gertrude Edwards, of 1407 East Fifty-sixth Street, Los Angeles, Cal., who were married a short time ago, went to the minister's on a motorcycle.



OUR big annual endurance run was over a course in the "west cuntry" this year, and covered most of Devon and Somerset, counties notorious amongst roadmen for their bad surfaces, terrific gradients and blind corners. The general results were a trifle mixed, as only 80 machines out of 126 starters succeeded in completing the course; yet those 80 performed brilliantly. The apparent paradox is instantly soluble by anybody who knows the ropes. Motorcycling is booming in England. Any fifth-rate engineer who has a few dollars of capital scents the chance of making a pile, and rushes into the designing and manufacturing business. He wants to get customers and rake in shekels before he can be sure he has got the goods right, and so he seeks a premature publicity by competing in trials when his experimental machines are really only half-baked. Add to this the fact that there is always a sprinkling of accidents, that somebody is sure to encounter real hard luck, and that there are not 125 riders in the country who are first-class jockeys and also first-class mechanics, and the percentage of failures is easily explained.

Veterans Not Bothered.

The decent riders who had decent machines jeered at the formidable gradients dished up by the promoters. There were many miles of single-figure gradient included in the course, and the rain practically never ceased from Monday morning to Saturday night; yet on an average the machines showed a consummate mastery of the gradients. This was of course mainly ascribable to variable gears, of which an analysis is appended.

Solo Machines.

Type of Gears.	Started.	Finished.	Percentages.
Epicyclic hubs	47	31	66%
Countershaft 2-speed	35	22	63%
Countershaft 3-speed	3	3	100%
Variable pulley gears.....	11	7	63%
Epicyclic engineshaft gears.	5	1	20%

The two latter types of gear performed worst on the hills, because their bottom ratio is limited by factors of design, whereas a man with a hub or countershaft gear can easily obtain a low ratio of 12 to 1, if circumstances demand it.

Passenger Outfits.

Twenty-two passenger machines started, of which exactly half finished, eight securing perfect scores. The passenger outfits included the following types: Single-cylinder, 3-speed motorcycle and side-car; 3 started, one finished, securing a gold medal; twin-cylinder,

multi-speed motorcycle and side-car; 12 started, 7 finished; securing 5 gold medals, one silver, and one bronze; four-wheeled cyclecars, with friction disc drive; 2 started, one finished; securing a gold medal; single-driving two-seated tricycle, with chain and gear transmission; three started, two finished; securing one gold and one bronze medal; four-wheeled cyclecars, with gear drive; 2 started, neither finished.

Where the Trouble Came In.

The main trouble with all these light passenger outfits was to secure adhesion of the back tires on greasy gradients, for want of which much time was lost and many marks were sacrificed. The rules stated that all hills must be climbed with the passenger "seated in a normal position," but these regulations were frankly ignored. The side-car passengers had to be as lively as kittens; they hitched their toes into the carrier stays, made their bodies rigid as pokers, and leaned their heads a yard overboard on bad corners, in spite of which there were several turn-turtles; on straight gradients they clambered bodily out onto the carrier to hold the driving wheel down. The Morgan cyclecar had a huge portmanteau full of stones strapped over its back wheel, and even then its crew got as far astern as possible.

Some Novel Stunts.

The G. W. K. four-wheeler wrapped rope round its driving tires, and so fared better than most. Colver imitated this dodge on his Enfield sidecar outfit, but the sharp stones cut the rope through, and he came to a standstill with 12 yards of clothesline inextricably entangled in his back hub—and so on. The above statistics are too mixed to prove the technical superiority of any particular type, but if I may venture a personal prophecy, the motorbicycle with three-speed countershaft gear is the coming solo mount, and the passenger market will be divided between multi-speeded twin-cylinder outfits and the cream of the four-wheeled cyclecars.

A Gymkhana in the Mud.

Towards the end of the week the weaklings had mostly been eliminated, and the 85 starters on Saturday morning were mostly going strong for a perfect score and gold medals. They had reckoned without the clerk of the weather. The ride opened with 15 miles of lanework, followed by a ten-mile non-stop, designed to make everybody tackle the infamous Porlock Hill with a hot engine. Porlock Hill is a sufficiently terrible climb when the road

is dry, but rain had fallen steadily all week. The hill is two miles long, and its crux consists of a 200 yard stretch of 1 in 6, half way up, beginning and ending in fearsome elbow-crooks, each claiming a grade of 1 in 4.

The surface is always bad, for ordinary traffic climbs the ridge by a beautifully engineered toll road, taking five miles instead of two; so the old road is never repaired, and at its best is a broad smear of loose red dirt, deeply rutted by descending carts. But for 28 hours floodwaters had been flowing steadily down between the rock banks, and the red dirt had been churned into a red sea, in which a car would sink to the axles, and a motorcycle would drop anything from four to twelve inches. I had telephoned the boys overnight what the road was like, and before entering the non-stop section the 3-speed hub men screwed down their engine pulleys to $6\frac{1}{2}$ to 1, which meant a bottom ratio of 13 on the hub.

That Terrible Climb

Entering the village there was a half-mile drop, and they coasted down this on low gear with their valves up to chill their engines. The rules say you lose 50 marks for touching the ground with your foot for any purpose in a hillclimb, but rules and penalties were soon forgotten. As soon as the front wheels struck the quivering quagmire, every man's foot shot out automatically; it was the only hope of keeping vertical. Plunging, slithering and sliding in all directions, with thrusting feet and aching wrists and frenzied faces the men tried to coax their unmanageable machines up the fierce gradient. One machine rushed clean off the road into a quarry; another fell over the bank and down into a thicket; numbers got their front wheels at right angles to the frame, and lobbed gently over sideways; some skidded heavily; two or three rammed the rock wall; one tried to climb a steep bank of heather at the roadside with a gradient of 1 in 2, and his machine went half-way up in its rush before it fell back on him; a Zenith rider skidded clear round, and went down the hill, then he had another skid, and came up again a few yards before his engine croaked out. Altogether only 24 out of 85 went up, and these more by luck than judgment.

Indians in the Trials

Four Indian machines were entered in the trials: the London depot of the Hendee company entered two 7 h. two-speeders, ridden by John F. Sviett and B. Alan Hill, and a $3\frac{1}{2}$ h. ridden by A. H. Alexander; while E. D. Dickson, a Cambridge undergraduate, entered his

privately owned 7 h. Alexander's $3\frac{1}{2}$ h. was overgeared for the job, and fell out at mid-week; having no spare sprockets, he could not lower his ratios. The three 7 h. machines all secured gold medals, but Alexander's defection put the team prize beyond their grasp. None of them was able to climb Porlock Hill, a fact which will tell American riders that I am not exaggerating its difficulties. The explanation of their failure is interesting: there were 17 high-powered twins, of from 5-8 h. in the solo class, all with variable gears, and only two, a 5 h. A. J. S. and a 6 h. Brough, got up Porlock; the faster and heavier the machine, the more unmanageable it proved in the red porridge.

Where the Prizes Went

Special prizes for Porlock Hill: Solo, Evans $3\frac{1}{2}$ h. Humber; passenger outfit, Morgan, 8 h. two-seated Morgan tricycle; slowest hill-climbing; solo, Baker, $3\frac{3}{4}$ h. Scott two-stroke; passenger outfit, Tassell, 7 h. Matchless side-car; best amateur hill climbing; solo, McMinnies, $3\frac{1}{2}$ h. Triumph; passenger, H. M. Jamieson, 6 h. Enfield and sidecar.

Trade team prize, three machines; first, Phelon and Moore (Pratt, Shaw and Drake), $3\frac{1}{2}$ h. chain-driven two-speeders, double friction clutch gear on bottom bracket counter-shaft; second, Rover (Newsome, Noble and Sproston) $3\frac{1}{2}$ h. belt drivers, with Sturmey-Archer three-speed epicyclic hub; third, James (Arter, Pollock and Brown) $3\frac{1}{2}$ h. chain-driven three-speeders, with sliding counter-shaft gear box.

In the Gold Medal Class

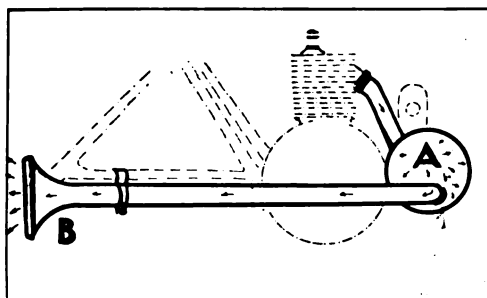
Gold medals: Rover (3 machines out of 3); Phelon-Moore (4 machines out of 4); A. J. S. (5 machines out of 5); Triumph (4 machines out of 7); Ariel (2 machines out of 3); James (3 machines out of 3); Scott (3 machines out of 3); L. M. C. (3 machines out of 4); Brough (1 out of 1); Humber (1 out of 4); Rudge (2 out of 6); Indian (3 out of 4); Motosacoche (1 out of 1); Premier (3 out of 5); Bradbury (2 out of 10); Swift (2 out of 2); Zenith (2 out of 5); New Hudson (2 out of 3); Precision (1 out of 1); Singer (1 out of 2).

Passenger machine gold medals: G. W. K. cyclecar (1 out of 2); Enfield side-car (2 out of 3); Morgan tricycle (1 out of 1); Clyno side-car (1 out of 1); Matchless side-car (1 out of 4); A. J. S. side-car (1 out of 1); Bradbury side-car (1 out of 1).

The Silencer Trials

The much-heralded muffler trials have resulted as inconclusively as everybody expected. What the governing body considers a reasonable degree of silence was obtained by using a muffler box of a volume equal to the cubical capacity of an engine multiplied by ten. This muffler is used as an expansion chamber, and the gas is conducted from it down a long straight open-ended pipe, extending to the rear of the machine. The Auto-Cycle Union has requested the trade to design their mufflers so as to secure this degree of silence, but there is no room on a $3\frac{1}{2}$ h. machine for an exhaust expansion chamber with a volume of 5,000 c.c., nor are the long rearward pipes likely to be popular.

In the 1,000 miles trial several machines used these long extension pipes, in conjunction with a standard muffler box, the latter being employed as expansion chambers, but if the machines were silent as they approached an observer, they were noisy going away from



him, the long pipes merely serving to convey the noise backwards. The Indians were far and away the most silent machines in this trial. The judges sealed all the cut-outs with flexible wire, and after the first two days the competitors stretched the wires with pliers, and opened their cut-outs at will.

THE COLUMBUS SITUATION.

COLUMBUS, Ohio.—A number of causes contributed to an action instituted in the local courts recently which threw the Columbus Motordome Company into the hands of Receiver Jerry O'Shaughnessey. The action was the result of pressing creditors who clamored for their bills, and Jack Prince, the builder of the saucer, brought the action in a friendly spirit. It precluded the naming of an unfriendly receiver. W. H. Snyder, who has been general manager of the motordome since its construction, and whose management is satisfactory, will continue in that capacity.

The principal cause for the failure of the project is the lack of street car service given by the Columbus Railway & Light Company. It was unfortunate that in order to get a sufficiently large level spot to erect the track it was necessary to go out such a distance from Columbus that the street car service was not the best. The street car company has refused to construct a spur to the track from the terminal of its Arlington line until assured that the Columbus public will support racing on the saucer. Another cause for the failure is that professionals of widespread reputation were brought here at great expense and that there was not a sufficient number to insure competition. It is the opinion of Mr. Snyder that what the people want is amateur racing if the fields are large and the racing close. In the future the races will be confined to stock machine riders.



President O. F. McClain, of the Indianapolis Club.

MILWAUKEE SENTINEL RUN.

MILWAUKEE, Wis., September 2.—Forty-one riders finished a three-day grind over the worst roads in Wisconsin in the Milwaukee Sentinel endurance run tonight. Each of the men who completed the tour under his own power will be given a medal. The recent rains put the roads in very bad condition and the riders were glad to hit town. One hundred and fourteen started in the run on Saturday morning. The first day's run of 97 miles was to Madison. Four of the contestants dropped out and the others checked in on schedule time. Leaving Madison on Sunday morning, the run to Oshkosh, a distance of 103 miles, was made. On this leg the motorcyclists met with their first real hardships. During most of the day they rode through the pelting rain and many dropped out before night. The riders were scheduled to arrive at Oshkosh at 6 p. m., but the first man did not get in until after 8, and from then on the others straggled in. It was 11 o'clock when No. 80, the last rider, was checked.

Nearly 20 dropped out. The riders left Oshkosh on Monday morning minus 13 more contestants, who shipped their machines by express and took the train back home. Leaving Oshkosh the riders ran into a cloudburst and crawled along through the mud. The roads in this section are the worst in Wisconsin; in many places the men had to walk and push their machines. The first arrived here at 7 p. m. and the last at 10:30. Miss Lillian Slaughter's machine was disabled 10 miles out of Oshkosh on the second day's run, and she was compelled to wait. Miss Lawler kept on, however, and arrived with the first batch of riders. She was covered with mud from head to foot. Another run for Sentinel medals will probably be made next year.

WILLIAMSPORT PICNIC.

SEVENTY-FIVE motorcyclists of Williamsport, Pa., gathered at Big Run on August 25 where William A. Myers, Indian, Excelsior and Thor dealer in Williamsport, tendered his annual picnic. Most of the machines left the city about 9 o'clock and by 10 o'clock the majority of Mr. Myer's friends reached the little grove of trees at Big Run, where the picnic was held. The refreshments were taken to the grounds on a big float which was fastened to a launch.

RUN TO THE SHORE.

PHILADELPHIA, Pa., September 2.—The Harley-Davidson Motorcycle Club of this city held a run today to Stone Harbor, N. J., via Millville, Cape May Court House and Vineland. On account of the races which were held on the beach at Stone Harbor it was necessary for the men to camp over night at the shore.

AN EASTERN TOUR.

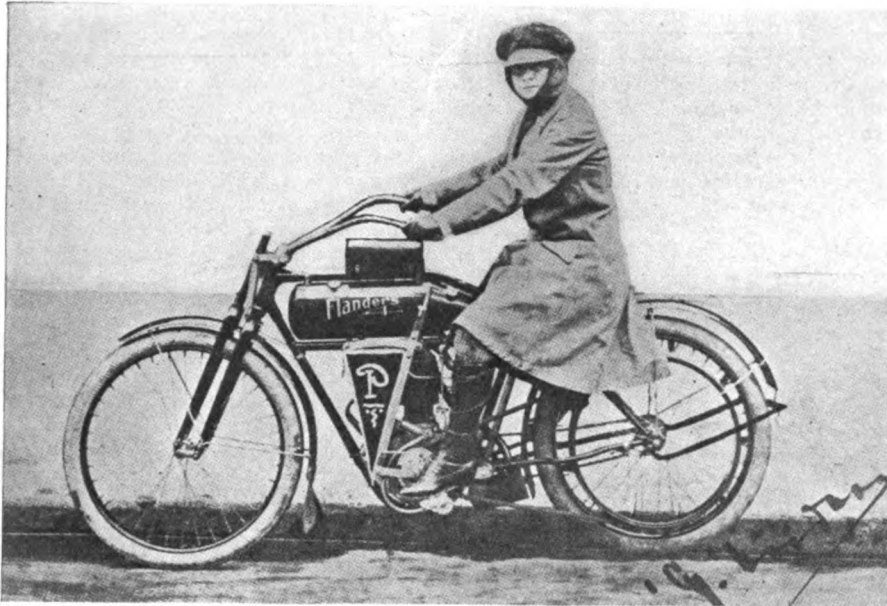
ZANESVILLE, Ohio.—R. B. Williams, H. J. Hoppstetter, R. S. Cosgrove and "Bonnie" Phillips, left Sunday, August 18, for a 2,000 mile motorcycle trip throughout the east. The intention is to travel eight states of the Union and to spend the time in sight-seeing. Messrs. Phillips and Williams are riding tandem on a T. T. Indian.

CHESAPEAKE OUTING.

BALTIMORE, Md.—The boys of the Chesapeake M. C. went up to Harpers Ferry and Halltown, W. Va., on Sunday, September 1, making the third long jaunt the members of this club have taken this season. An early start was made and the going was excellent.

GIRL LEAVES FOR THE COAST

Miss "Cy" Woodman, Mounting Flanders 4, is Given Rousing Send-off at New York City Hall as She Begins Trip to the Golden Gate—Now Headed for Chicago.



UNDER fire of several motion picture machines and surrounded by a mob of well-intentioned but excitable folk of both sexes and all stations in life, Miss "Cy" Woodman, erstwhile newspaperwoman, lecturer, globe-trotter and broncho-buster, swung into the saddle of her Flanders 4 at the City Hall in New York at 3 p. m. on August 30 and began the first leg of what she hopes will be a journey to San Francisco. She spent Friday night at Yonkers and is now on her way to Chicago.

When it is stated that Miss Woodman started her trip at New York City's seat of government—still so referred to despite the newspapers—it must not be inferred that she hopped aboard her machine and chugged blithely out of the metropolis. Far from it. The crowd wouldn't have it that way. While the moving picture men were still grinding away at their merriest, and Miss Woodman was fastening a small silk American flag to her handlebar, two policemen, who happened not to be testifying in graft investigations, appeared on the scene and insisted that if the rider expected to reach San Francisco an early start wouldn't do any harm. They explained that traffic was being tied up in front of the City Hall and that several people in Broadway and Park Row were waiting for a chance to get through. Accordingly Miss Woodman started.

The Official Start.

With her motor purring encouragingly she let in her clutch and traveled nearly fifty feet. Then the crowd closed in on her, a solid wall, and she stopped. Upward of 500 men and boys were shouting farewells and advice to her and even the herculean efforts of E. C. Kicherer, of the Sun Motor & Supply Company, agents in New York City for the Flanders, could not open a path for the machine. Mr. Kicherer was here, there, everywhere, with

the celerity and unfailing good humor of a seasoned stage manager, but he could not arrange for the rider to proceed without climbing a stiff grade over a few portly business men. The machine was finally wheeled into Broadway and the crowd went with it. Riding a few feet at a time and then pushing a few more feet Miss Woodman reached Chambers street and turned off Broadway. So did the crowd.

Out of the heaviest traffic Miss Woodman mounted again and half a thousand boys, suddenly stricken with motorcycle fever, ran on both sides of her, behind her and in front. She traveled several blocks before the crowd closed in again. Then some one struck her handlebar and she went down, but scrambled to her feet uninjured. She had traveled less than a quarter of a mile, and the hardships of a trans-continental trip were being fully impressed upon her. Her struggle to make headway had tired her considerably but her nerve was still intact and it was with reluctance that she agreed to Mr. Kicherer's proposition that she proceed uptown in a taxicab while her machine was ridden by one of the Sun company's mechanics.

Motion Picture Men Get Busy.

At Columbus Circle the prospective trans-continentalist again took charge of her machine and rode it to and fro while the motion picture men turned their mysterious little cranks to their hearts' content. Then she proceeded to the headquarters of the Sun Motor & Supply Company, at 307 Amsterdam avenue, made a few final adjustments and set out for Yonkers. All things considered the start had been an auspicious one, although a severe test of the rider's pluck.

Miss Woodman names Philadelphia as her home city, but for years past she has been en-

gaged in newspaper work in New York. Prior to her arrival in the metropolis she had traveled considerably and had spent enough time in the West to establish a reputation as a daring equestrian. Her interest in the motorcycle dates back only about three months. It first manifested itself after friends had persuaded her to abandon aeroplaning aspirations. Having once taken to the motor two-wheeler Miss Woodman—"Cy" is a pen name, by the way—decided that it offered her a business opportunity, her business being to transform experience and adventure into coin of the realm, and in that way the plans for the cross-country trip were taken up.

A Nervy Undertaking.

The undertaking is a personal one. While the New York representatives of the Flanders company assisted the rider in every way possible they are not directly concerned in the enterprise. It is the rider's intention to defray expenses along the route by selling postcards, showing her on her machine, and by giving lectures and writing of her experiences for newspapers in the larger cities through which she will pass. She has also been given to understand that a theatrical contract will be waiting for her in New York if she succeeds in completing her journey to the Golden Gate. Before leaving New York Miss Woodman entered into an agreement to write a serial story of her trip exclusively for *MOTORCYCLE ILLUSTRATED*, as far as the motorcycle field is concerned. Other articles from her pen will appear in half a dozen recreation and sporting publications.

When she left New York Miss Woodman wore a snug-fitting khaki jacket, a short khaki skirt and knickerbockers. Tan puttees and tan shoes, the latter showing only slight concessions in the matter of heels, completed her riding outfit except for a heavy green motor-

ing cap, the flaps of which were pinned down over her ears. For the first leg of her journey the rider is carrying only a valise, strapped to her luggage carrier, and her supply of spare parts is scanty. Later she intends to exchange the valise for a suitcase and increase her lay-out of parts. Her route to Chicago was mapped by the officials of the Automobile Touring Club in New York and the club's Chicago branch will map the remainder of the trip, if the rider reaches the Windy City still in a mood to continue her cross-country jaunt. New York motorcyclists told her that she will be putting up a remarkable performance if she reaches San Francisco in 80 days, but she took to the road with full confidence in her ability to make the trip in 50 days. Those more conservatively inclined believe she will be doing all that can be expected of her if she reaches Chicago.

On leaving New York Miss Woodman entertained no doubt as to the outcome of her undertaking. She listened to stories of abandoned trails, roads hub deep with gumbo, stretches scores of miles long which must be ridden on railroad ties, countless streams which must be forded and mountains to be topped and then remarked that, barring broken bones, she was bound to get through. Pluck of this brand demands some consideration, and metropolitan motorcyclists will be glad to see the little lady make the most of her fighting chance.

BIG RUN SCHEDULED.

OFFICIALS of the Angel City M. C. of Los Angeles, Cal., have about completed plans for an endurance run which promises to be the longest on record in this country. The course will lead to Oakland in such a way that many hills and stretches of bad roadway will be included, and the riders look forward to a grind that will go down in motorcycling history on the coast. The members of the Oakland Club are to act as timers, checkers and other officials, and they will also care for the machines of the endurance riders while they are in Oakland. The new address of the Angel City Club is 433 Fifteenth street.

A SUCCESSFUL run to Ft. Wayne and return was recently conducted by the Goshen (Ind.) Motorcycle Club.

CENTRAL JERSEY RUN

Trenton Riders Cover 200-Mile Route and Seventeen Finish Within Schedule Time.

TRENTON, N. J.—The 200-mile endurance run of the Central Jersey M. C., which was postponed from August 11, was held on August 25, when 25 riders took to the road for the long grind. The starting list was made up as follows: W. Albert, Excelsior; Levi Holmes, Harley-Davidson; J. Petry, Harley-Davidson; F. C. Molnelt, Flanders; Joe Tietz, Thor; A. Bethke, Reading Standard; Frank Ketterer, Indian; Leon Richmond, Indian; Waddock Obeski, Indian; Abe Bernstein, Reading Standard; Parker, Sweet, Harley-Davidson; Howell, Scarborough, Harley-Davidson; A. Dunham, Harley-Davidson; James M. Fenton, Harley-Davidson; E. S. Soltner, Harley-Davidson; William Cooper, Indian; David Marshall, New Era; Albert Shaw, New Era; Robert Fitzgeorge, Indian; G. A. Frounfelker, Indian; Ernest Henk, Indian; E. F. Lamson, Indian; F. H. Arent, Indian; Leon Pellenger, Harley-Davidson, and Russell Vandergraft, Harley-Davidson.

The finishers were: Lamson, Frounfelker, Fitzgeorge, Cooper, Soltner, Fenton, Sweet, Dunham, Scarborough, Obeski, Arent, Holmes, Petry, Molnelt, Tietz, Richmond and Leon Pellenger.

The route was as follows: Trenton to Pennington, to Ringoes, to Flemington, to White House, to Clinton, to Washington, to Beattystown, to German Valley, to Morristown, to Chatham, to Springfield, to Newark. The return was via Elizabeth to New Brunswick, to Old Bridge, to Matawan, to Freehold, to Hightstown, to Cranbury, to Dayton, to Monmouth Junction, to Brunswick Pike and into Trenton.

SWELLING THE RANKS.

RURAL mail carriers in Fairmount, Fowler, Crawfordsville and Mooreland, Ind., have joined the ranks of progressive mail carriers and are delivering their mail on motorcycles.

IT is expected that a \$10,000 motordrome, to be erected in Chattanooga, Tenn., will be completed before the winter sets in.

FIRST SOCIAL RUN.

BALTIMORE, Md.—The Maryland M. C. successfully pulled off the first sociability run held in this section on Sunday, September 1, and so enthused are the members over it that it has been decided to make it an annual feature. The starters numbered about forty and the distance covered was well over a hundred miles. There was only one checking station and that was at Emmitsburg, the turning point. Westminster, Frederick, Ridgeville and Ellicott City were the places the boys were compelled to go through. Those with the odd numbers went to Frederick first and those with the even numbers went through Westminster first, so that the boys were passing each other at different times during the day.

About thirty finished within the time limit. There were several bad spills and breakdowns on the way but no one was injured. A number of prizes were offered.

RACING AT ISLE OF PALMS.

NEARLY 4,000 people recently witnessed a twenty-mile motorcycle race at the Isle of Palms, Fla. The starters were M. S. Sullivan, Indian; John Bulwinkle, Indian, and T. C. Smith, Flying Merkel. Smith carried away the prize, finishing in 26:30; Bulwinkle was second, 33:20, and Sullivan third, 38:15.

VIEWED BEAUTY SPOTS.

BALTIMORE, Md.—A large number of the members of the Maryland M. C. spent Sunday, August 25, in the mountains inspecting the beauty spots to be found around Pen Mar. Buena Vista and Monterey on the crest of the Blue Ridge.

BACK FROM FOREIGN TOUR.

DR. J. E. Clark and Ross Arthur, of Streator, Ill., are back from a European motorcycle tour. They visited England, France, Scotland, Switzerland, Holland, Belgium and Italy.

SHERIFF MISCHKE, of La Salle County, Ill., has purchased a motorcycle, which is to be used in chasing criminals, serving writs, warrants, and other official papers.



Start of recent run of the Central Jersey Motorcycle Club, of Trenton, N. J.

Through MUD and SAND in SOUTH CAROLINA

More Work Than Recreation In a Trip Over Inundated Roads, Swamps, Etc., In Southern Part of the State—Wash-outs and Numerous Other Obstacles.

by JOHN C CROMER



Bridge Was Washed Away.

AS soon as the warm sunshine of last spring had begun to dry up the muddy roads, I started in to tune up my motorcycle for a spin of some 150 miles, to visit relatives living in the lower part of South Carolina, near Waterboro. My mount had been caged for several months, with scarcely enough exercise to keep it limber, but it was apparently in good trim. I knew that fifty or seventy-five miles of this road would be deep sand, but I was very anxious to make the trip and was willing to trust to the ability of my machine to get through without serious trouble. I packed my wardrobe in a small handbag and placed it in a rack (my own make) in front of the handle bars. I was joined by I. T. Timmerman, a friend who had made a recent purchase of a single cylinder. Though he had but little experience, he was an enthusiast.

On May the 20th we left Newberry, S. C., our home town, very early in the morning. The weather was fine and we clipped off the first twenty miles in good time. Then we found a stretch to negotiate, thirty yards of which seemed to require as many minutes. Mudholes nearly knee deep extended clear across the road, and embankments on both sides made it impossible to go around. After a mile or two of this kind of road you could hardly tell my gray Wagner from Timmerman's blue Indian, and as for our own appear-

ance—well, it's too early to describe that. Fortunately, after a mile or two conditions improved. From Lexington the road was excellent all the way to Columbia. Here we replenished our gasoline supply and set about to inquire the roads to Orangeburg. There are two routes, one on the west side of the Congaru river, which is the most direct, but very sandy and swampy. The other was on the eastern bank, a hard clay road crossing at Bates ferry to the west side. This was a very much longer course. Timmerman, wiser than I, deserted me here. I had no difficulty in finding the right road, which was built of hard clay. I ran my motor to the limit of its speed capacity, and began congratulating myself for selecting this route when, at a turn in the road, I came upon a pond of water about thirty yards wide. The only means for crossing was a foot log three feet from the ground. The water did not seem to be over eight inches deep, so I decided to ride my motor through, and, going back some distance to get a start, I came up at about a 20 mile clip. Half way, my motor stopped, and I had to get down and drag the machine out, which proved to be no small task. But I managed somehow to do the stunt, and after a little coaxing soon had the motor going again, speeding for the river which was now only a few miles off.

There are two spurs of the river, divided by an island. The first is spanned by a bridge, the other crossed by a ferry, but recent heavy rains had completely washed the bridges away. It seemed that my journey had come to a sudden end. It was 35 miles back to Columbia, the only other place where I could cross back to the west side, and that road was considered almost impossible. A very discouraging situation indeed, but I was determined not to be outdone by circumstances, so I procured a batteau and hired a darky living near to row me over.

We crossed the channel in safety and landed in mud only two feet deep. It required some hard work to get my machine upon hard ground, and then my troubles had just started.

The island was about two miles across and traversed by ten or fifteen small streams, the bridges across which had been washed out of their places. Trees were uprooted and strewn across the highway, and great washouts here and there made the road almost impassable, even for an unencumbered pedestrian. A small boat and a ladder would have better fitted me for this expedition. I lugged and toiled though, lifting my machine over trees, wash-



A Handy Row-Boat.

outs and rifted bridges until I had penetrated about a mile of this awful jungle. Then I left my machine and walked to see if conditions were likely to improve but found little consolation. I returned to my old mount, not willing yet to abandon it, though I was fatigued, as it was very hot. My watch was pointed to an hour far beyond the time for square meals, and no relief was in sight. Not a cheering sound could be heard, not even the bark of a dog. There were scarcely any signs that a vehicle had ever traveled this way. The afternoon was fast passing away and to spend a night in this desolate region was not at all a pleasant prospect.

I worked my way a little at a time and finally, after more than three hours of hard work, I emerged upon the other river bank. Fortunately I found an old darky nearby fishing from a little boat. I hired him to put me across. He landed me in drifted sand about knee-deep and I gave him a quarter to help me push my machine fifty yards.

I felt very much encouraged now by the fact that I was off the island, but I still had several rifted bridges and deep washouts to cross. I managed to get over them and once more on good roads. I repaired to a little village called Fort Mott, where I obtained food and refreshments.

My next stop was Saint Matthews. I found

the roads excellent and on down as far as Orangeburg. I replenished my gasoline supply and made my final dash for Branchville, the last town of any size I expected to pass.

After leaving Orangeburg the roads for seven miles were good. Then I came into the sandy region. This, of course, retarded my progress, but I made pretty good time, reaching Branchville a little before 6 o'clock. I was now 25 miles from my destination and I had feared that this would be the worst part of my journey. It was bad but I found my worst trouble was keeping to the right road. I had decided to go by a little village called Smoak's and thought I might reach that place by dark, as it was only 12 miles distant. Automobiles are unknown here and motorcycles attract as much attention as a flying machine would, so it is not difficult to get lost when you leave the railroad. However, I set out from Branchville at about 6.20 o'clock and had no trouble for about five miles. Then the road forked. I consulted my map and found nothing to indicate another road there. Of course, I took the wrong road, but did not find that out until I had traveled seven or eight miles. I decided then to give up the attempt for the present, having learned that a white family lived in the neighborhood. When I asked about lodging for the night, they assured me that I was welcome.

I had traveled 149.4 miles since leaving home, which was far better than I had expected. The next morning, much refreshed, I resumed my journey. Though the roads were still sandy, I soon came to the end of my jaunt, 159.6 miles. On my return I took a different route, and had no trouble whatever, making the run in a little more than eight hours.

WON \$500 PURSE.

IRA ALBERT (Harley-Davidson) carried off the victor's purse of \$500 in a five-mile race at Waverly, Iowa, recently, coming in 100 feet ahead of his opponent, Elmer Dietz (Thor). This was the second race between the two men, the first having been won by Dietz.



George M. Johnson, One of Our Contributing Editors.

A FAIR RIDER'S OPINION

MISS DELLA HOHL, of Indianapolis, Ind., is a full-fledged motorcycle enthusiast, who believes that the sport should be enjoyed by both sexes. She says her machine is easily operated, clean and silent, and believes that a woman can ride a motorcycle without sacrificing her dignity in any way.

"The efficiency and economy of the modern motorcycle have made it a necessity in business," says Miss Hohl. "They have also combined to open a new world of pleasure for those seeking recreation."

AN ALABAMA MEET.

SIXTEEN motorcycle events will be held at the Alabama State Fair in Birmingham, from October 3 to October 12. Valuable prizes will be awarded to the winner. The events are sanctioned by the F. A. M. and promise to draw well.

"SPOONING" UNDER DIFFICULTIES.

MANY cities throughout the country have placed a ban on tank riding, but the officials of Des Moines, Iowa, are among the first to rule against a regulation tandem seat. The Anthony Comstockish guardians of public morals in the Iowa city assert that riders and their girl passengers are in the habit of spooning as they spin through the streets, thereby placing in jeopardy the finer sensibilities as well as the necks of hapless pedestrians. All of which is calculated to provoke smiles from motorcyclists, for piloting a two passenger motorcycle through city traffic and spooning at the same time would entail a display of acrobatics beyond the capabilities of even the versatile owner of a single-tracker.

A NERVY MESSENGER

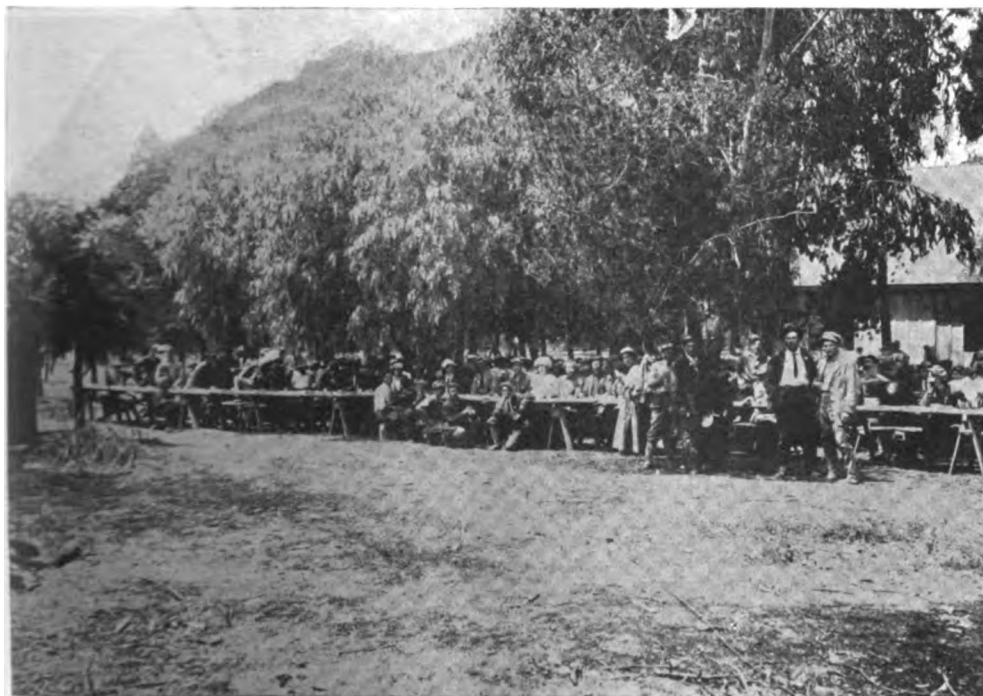
JUST as a Frisco train pulled out, Glenn Smith, a mail messenger at Lyons, Kansas, noticed a mail pouch he had forgotten to put on the train. Smith's motorcycle happened to be on the spot, so he threw the mail bag across the handle bars and started after the train, riding the ties. He knew the train stopped at Saxman, ten miles further on, but he arrived there a few seconds too late. Being familiar with the lay of the land, he knew that by riding down the country pike, he could overtake the limited as it passed the road. He set out at full speed and reached the track just as the train approached and threw the pouch to a railway messenger standing in the doorway.

AN UNEXPECTED DIVE.

GUSTAVE HENCKER, of 93 Targee street, Stapleton, N. Y., while riding on a dock at the foot of Water street in Stapleton recently, lost control of his machine, and both rider and machine went overboard. Hencker could not swim, but was saved by a bystander. The machine was lost.

PLANNING ROAD RACE

SEPTEMBER 1-2, the Bakersfield (Cal.) Motorcycle Club conducted a run to Fresno. A committee is now at work selecting a course for a road race of about 75 to 100 miles, which is to be held in the near future.



Part of the Big Crowd Lunching at Livermore (Cal.) Meet.

ON WANDAMERE BOWL.

SALT LAKE CITY, Utah.—The match race, which was to be the feature of the program on August 30, was somewhat of a disappointment to patrons of the Wandamere Motordrome. Ward's machine was still out of commission, and he was unable to compete at his best. He rode his own machine in the first heat, but used one of the track machines for the second heat. This gave Whittler both heats.

In the eight-mile race, the closing event of the evening, Ward rode another track machine and dropped out in the second mile. Whittler, Brodbeck and McNeil were riding in the order named. Brodbeck took good care not to let McNeil go around, and each time that he attempted to do so, Whittler would turn on a little more juice to help his team mate out, and they would both go up the track, leaving McNeil at the fence. The finish was one of the best seen on the track this season; they shot under the wire as they had ridden throughout the race.

The three-mile race for B Class professionals was a good one; Rognon won it after a hard fight with McCall. They were very evenly matched.

The five-mile open event was won by McNeil, who had an easy time defeating the other riders. In the first mile McNeil led most of the way; when Brodbeck went around, remaining in front for five laps. McNeil then came around and held the lead to the finish.

READING RACE MEET.

READING, Pa., August 31.—Under the auspices of the Reading Motorcycle Club six spectacular races were held on the fair grounds today. The weather was ideal and at least 2,000 people witnessed the contests. In the first event, a five-mile novice race, Pierce Hettinger, riding an Indian, won first prize.

Harry C. Becker, riding a Reading Standard, took first place in the five-mile race for private owners. His time was 6:50 $\frac{3}{4}$. In the third event five men entered the 10-mile race for trade riders, A. E. Braudreick (Indian), John Sparely (Merkel), Harley Williams (Indian), Joseph Grossman (Indian) and Paul Hart (Indian). Braudreick and Williams raced nip and tuck and in a strong finish, but Williams won the race. Time, 13:09 $\frac{1}{2}$.

AN ALTOONA RUN.

FLYING MERKEL riders in Altoona, Pa., were not unduly alarmed when they discovered on a recent outing that they numbered 23. Instead they took particular pains to demonstrate that hoodoos were out of their line, and the occasion was a pleasant one. The affair was engineered to perfection by W. S. Aaron, Merkel agent in Altoona. Six of the riders were accompanied by ladies. A stop was made at Loysburg for dinner and the squad then made a leisurely trip homeward.

TWO motorcycle police officers should be on duty at each precinct station in Minneapolis, Minn., says Chief Mealey, who is asking the city council there for an appropriation with which to purchase five additional machines.

IN order to cut down expenses the Bernardino (Cal.) Motorcycle Club has decided to dispense with its present clubrooms until next spring.

SHORT GRASS FINALE

Riders Found Fine Scenery and Some Hard Going on Last Few Days of the Big Western Tour.

THE Short Grass tourists left Denver on the morning of August 20, very early, bound for Colorado Springs. The scenery and roads were the best they encountered during the entire trip up to this time. They arrived in Colorado Springs in time for dinner, where they amused themselves for several hours; afterward they took a trip around Colorado Springs, taking in the Garden of the Gods and up through the Seven Mountain Passes, where they finally reached the top of Eagle's Pass. This is only a short distance from Pike's Peak. While up in the mountains, rain fell heavily, and the tourists were pretty well soaked by the time they got back to Colorado Springs.

On Wednesday, August 21, they left Colorado Springs at 8 o'clock for Canon City, a distance of 45 miles, over the most beautiful mountain roads of Colorado. These roads are kept up by the convicts stationed at the State Penitentiary in Canon City. The trip was made without trouble, except for the fact that a few riders had to pedal their machines up the steep hills.

Arriving in Canon City at 2 o'clock, the rest of the afternoon was spent in visiting points of scenic interest, including the beautiful apple orchards, and several historic landmarks. At the same time they visited the State penitentiary and were shown through from one end to the other. On Thursday, August 22, at 8 o'clock, the tourists took a trip to the Royal Gorge, which is regarded as the most beautiful spot in Colorado. Several pleasant hours were spent by the tourists in looking at the beautiful scenery, and just about the time they were to leave, one of the tail-enders arrived with a sack full of bottled beer; there was a scramble to see who could get to him first, and George Puls won first prize.

After leaving the Royal Gorge a trip to Sky Line Drive was made, where a beautiful bird's-eye view of Canon City could be had. After lunch, a race meet was held, in which

Wells Bennett took the honors. At 4 o'clock the tourists left for Pueblo, where they arrived covered with mud and soaked with rain.

The Goodyear tire car crew left four to five minutes after the bunch, and rode about twenty miles, where they found Dr. Patterson fixing up a rider's broken fork. They helped the doctor, and in a few minutes were on their way, but the rider with the broken fork reached a town five miles away and saw a train approaching Pueblo; he decided to ship his machine. Dr. Patterson kept on going. He always stayed ahead of the tire car by at least a mile up to the time the roads became very muddy from a severe rain storm.

Dr. Patterson, who was riding his daughter's machine that day, was too weak from his injury to push his machine through the mud where he could get on solid footing. When the tire car came along, the crew strapped his machine onto the side and carried both Patterson and the mount to Pueblo. As bad as the roads were from this point to Pueblo, a distance of thirty miles, accounts showed at night that all the tourists arrived safely.

The Deere Plow Company, of Moline, Ill., which manufactures the Velie automobile, placed one of their ten trucks in the Short Grass Tour in charge of Herb Schimp, of Kansas City, their branch manager. Mr. Schimp fixed the truck up to represent a prairie schooner, and was of great assistance to the tourists.

George Puls, the Harley-Davidson representative, is also to be awarded honorable mention, as he was the only rider in the tour who from start to finish worked for the interests of the tour and motorcycles in general, more than he did to get to his destination.

GEORGE REEVES, of Missoula, Mont., recently traveled from Seattle to Missoula on his motorcycle. The roads were good, with few exceptions.

SCHUSTER & SIEBOLD, well-known motorcycle dealers of Columbus, Ohio, have filed a petition in voluntary bankruptcy, alleging debts amounting to \$2,013.38, with assets of only \$1,054.98.



FOR R. F. D. SERVICE

IN the accompanying photograph, A. A. Farnsworth, of the sales department at the Flanders factory, is shown on the road with one of the Flanders machines which is ordi-

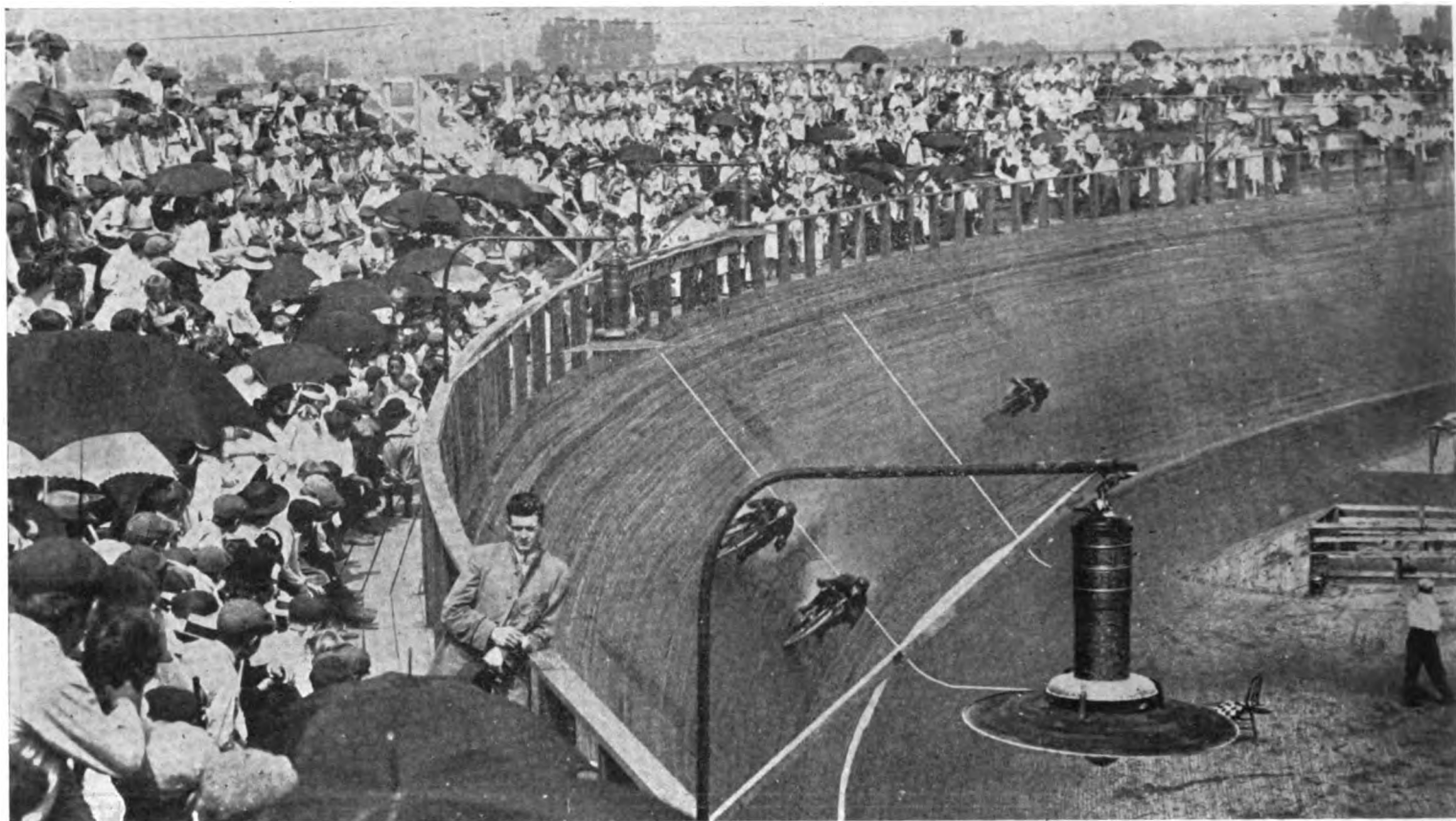
narily used for mail deliveries by one of the rural carriers. It will be noted that the arrangement of the mail pouches permits of a heavy load being carried without detracting from the general appearance of the outfit.



THE SHORT GRASS TOUR

1. Inez Patterson on her 4 H. P. two-Speed Indian.
2. Scenery en Route.
3. The bunch at Glacier Lake.
4. Geo. L. Schofield in his glory.
5. Inez Patterson and E. E. Flippen, Jr., Goodyear man, on top of Gorge.
6. Party at top of Royal Gorge.
7. Mountain road between Colorado City and Canon City.
8. Coming into Canon City.





Hollenbeck, Klebes and Vanderbery in action on the Pt. Breeze Motordrome.

AT PHILADELPHIA.

PHILADELPHIA, Pa., August 22.—The races at Point Breeze Park tonight were the means of bringing out the largest crowd in the history of the motordrome. At the time of starting, the stands were packed and fifteen hundred people were trying to gain admission. Hartley Thomas, the western phenom, captured every event in which he was entered. In the unknown distance event he rode a spectacular race. The distance covered was nine miles, which he rode in 6:09½. This is the fastest time that has been made on this track. Hollenbach, on a Bradley, rode a match race with Klebes, Indian, and gave the latter the race of his life. In the Class B event, the racing was the best contested of the evening, the riders doing four miles in 2:50.

HOLLENBACH A WINNER.

PHILADELPHIA, Pa., August 27.—The feature of the races at the motordrome last night was the appearance of L. Fleckenstein, the Denver rider, who made his debut in a special match race with Hartley Thomas. Through some trouble with the express company, Fleckenstein did not have his own machine, and was compelled to borrow one for the occasion. He won the match race through the breaking down of his rival's machine. Hollenbach won every event in which he was entered.

FLECKENSTEIN IN FORM.

PHILADELPHIA, Pa., August 29.—This proved to be a big night at the Point Breeze Motordrome. The added attraction last night was a walking match. L. Fleckenstein, the Denver motorcycle star, was again the feature-maker of the evening, although Thomas pushed him hard. The special match race between Fleckenstein and Thomas had to be called off. Harry Klebes did not ride last night owing to illness.

TORONTO RIDERS BUSY.

THE speed merchants of Toronto, Canada, are facing a heavy program of motorcycling events to be staged on the exhibition half-mile dirt track during the next five weeks.

On the last day of the exhibition, September 7, a series of races will be run off for the

benefit of the thousands of fair visitors. On the following Saturday, the single-trackers will mix things with the racing motorcars at an auto race meet, while on September 28, the annual fall race carnival of the Toronto M. C. will be held. The titles of Ontario Provincial championships will be disposed of on this occasion also, the C. M. A. events being run off under the auspices of the Toronto club. The annual Ward Marathon is to be held on Saturday, October 5, and, as usual, the riders will be called upon to entertain the crowd.

TULLIS CLEANED THE BOARD.

KENTON, Ohio.—D. L. Tullis had a walk-away in the motorcycle meet at Mt. Victory August 17, winning all events in which he entered. In the ten-mile handicap event Tullis gave the other starters almost two full laps of the track. He won this event, also the five-mile handicap and the pursuit race. Summary:

Three-mile open race—Won by Houser, of Findlay; Waltur, of Findlay, second. Time, 4:45½.

Five-mile handicap—Won by D. L. Tullis; Houser, second. Time, 7:42½.

Time trial by Tullis; one mile exhibition; time, 1:20.

Ten-mile handicap—Won by Tullis; Houser, second. Time, 14:45.

Pursuit race, ten-mile limit—Won by Tullis; Lautenschlager, second; Swartz, third.

MISS L. WILLIAMS, of Los Angeles, who has won several medals for bicycling and motorcycling, is so enthusiastic about the latter sport that she wants to join the local police motorcycle squad.

MOTORCYCLES are being used for rush deliveries to neighboring towns by a large concern of Danvers, Mass.



AN ECONOMY WINNER.

JOE HOLLE, of Twentieth and Folsom streets, San Francisco, widely known as "The Bike Doctor," forwards the accompanying photograph of John B. Swanson, and the Harley-Davidson on which he made a remarkable showing in a recent economy contest at Alameda. The machine is a stock model, chain driven. Swanson carried a passenger, and covered five miles on 9¼ fluid ounces of gasoline. Swanson is first lieutenant of the San Francisco M. C.

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President

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SEPT. 5, 1912**

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H. N. CONDUCT,
Secretary

"THE EARLY BIRD," ETC.

WHILE the outlook for unprecedented activity in motorcycle manufacturing during 1913 is a source of satisfaction to all who are interested in the trade, it is also forcing factory heads to realize that the coming season is due to be a trying one, and the wise builders are suggesting that dealers get on the firing line without delay. In other words, it seems to be generally taken for granted that the output of motorcycles for the 1913 season will fall thousands below the demand. Some manufacturers, not given to extravagant predictions, even go so far as to hint that the output will cover no more than half the orders.

The far-sighted dealer should find much food for thought in these statements. The sooner dealers close for territory and take up the matter of orders the sooner will the factory men be placed in a position to reduce the situation to figures and act accordingly. An early start on deliveries will work for more satisfaction among both dealers and riders than many weeks of overtime and double-shift production at the top of the season. No manufacturer hankers for these rush tactics; he prefers to strike his gait—the faster the better—early in the season and maintain it, but until the dealers are heard from he is considerably at sea. A record output is assured for 1913, but if you are looking forward to handling a share of it the time is at hand to open negotiations. Even a record output has its limitations.

THE RACING SITUATION.

MOTORCYCLE racing is rapidly developing—or, shall we say, degenerating?—into a business. The tendency is to supply a hungry public with what it wants—something spectacularly hippodromic. Be that as it may, real competition of the old-fashioned variety, with riders, dealers and manufacturers engaged in a strenuous endeavor to "beat the other fellow" is all but played out. The manufacturers are no longer active participants. Glance over the advertising pages of this issue and note how few race winnings are published. Racing, being a form of competition, has a value which is not to be ignored, but it seems to have had its day insofar as the manufacturers are concerned. Race meets are more numerous than ever before, but the makers of machines are no longer intruding to any extent. They have learned their lesson well.

SIDECARS.

EXTENSIVE use of a sidecar has convinced the writer that this side of the business and sport promises exceedingly well. The three-wheeler requires only a little improvement to make it a genuine competitor of certain automobile types. An attractive rig of the former variety is always certain to gain the favorable attention of the average bystander, and, what is more to the point, when used over at least tolerably good roads, it is great fun. We confidently believe that three to five times as many cars as there are now in use will be seen on the roads of the country by this time next year. Even now the demand is greater than the supply.

DESIGNS, PRICES, ETC.

NO radical changes in either designs or prices are expected in 1913 models. Except for the price-cutting jamboree of a year ago, history promises to repeat itself in the motorcycle trade. The production of machines and parts, however, will reach unprecedented and, until a few months ago, totally unexpected figures. Ask any parts-maker about 1913 specifications.

A GOOD SIGN.

RAILROAD officials advise that within a month there will be a freight car shortage of at least 150,000. This condition, while annoying to shippers and buyers alike, is not without its compensation. It points to a business boom of large proportions, and that on the eve of a Presidential election. The opinion is growing that no matter who lands the Presidency, trade will be fine and money easy in 1913.

ABOUT THE PAPER.

THIRTEEN thousand three hundred copies of this issue of *MOTORCYCLE ILLUSTRATED* are being printed, and the net paid circulation of this number is only 100 or so shy of 12,000. That's 50 per cent. higher than our paid circulation in September, 1911. A rather healthy growth, is our contention. The average business man is well satisfied with, say, a 20 per cent. annual increase.

JOE ESLER and Oscar Kathman, of Quincy, Ill., are waxing enthusiastic over the organization of a motorcycle club in Quincy and it is expected that the club will be established within the next few weeks.

THE NEW F. A. M.

DUE to circumstances beyond the control of the F. A. M., Pacific Coast members have been more or less neglected by the national organization. Their complaint to that effect is not without some justification. But under the new order of things, with government of, for and by the States, California and Washington will have every opportunity that is open to New York or Massachusetts. Those who doubt this statement are urged to write to Secretary Gibson for copies of the revised constitution and by-laws, which have just come off the press. Read the articles in both the constitution and the by-laws defining the duties and powers of State and local commissioners, and then get busy, determined to make your State the best organized in the Union. Under the new constitution the more the members of any State do for the F. A. M. in their State, the greater will be their returns in the way of benefits. Pacific Coast members, get a copy of the new constitution, and prove that to your own satisfaction.

THE RIGHT SPIRIT.

IN Dr. Patterson, the F. A. M. has a chief executive whose pluck is admirable, to say the least. Not one man in a hundred would have seen the Short Grass Tour through under the conditions of physical durability which confronted him when he started. Notwithstanding, and appreciative of the fact that his leadership was necessary to make the tour a success, Dr. Patterson started and, withal, he was there at the finish. This is enthusiasm of the highest and most commendable type, together with a determination to carry things through that promises well for the organization of which the Kansan is president.

ANOTHER BIG FEATURE.

THE adoption by the United States government of the motorcycle tri-car for the collection of mail should prove to be a big help to manufacturers in their efforts to promote the commercial use of the two and three-wheelers. Government approval of any product is generally recognized as sufficient evidence of its excellence and adaptability. In this particular instance, as always, the tests at Washington were severe and exhaustive, and that endorsement should follow such rigid try-outs demonstrates as much as the satisfaction of a dozen private firms.

RECORD THRONG ON LOS ANGELES RUN

More Than 1800 Riders Participate in Annual Outing at Venice—Jake De Rosier in Pacemaking Car

NO less than 1,800 motorcyclists participated in the annual club outing of the Los Angeles M. C. to Venice, on August 18, and it is stated that the turn-out was in many respects the most remarkable ever arranged by California riders. According to the official count of the club committee 1,058 motorcycles were in line, 791 carrying tandem passengers and 12 being fitted with side-cars. Figuring on this basis the club officials feel safe in saying that at least 1,873 riders took part in the program. A number of enthusiasts from neighboring towns were unable to join the big squad in the morning and were compelled to ride direct to Venice, which is known as the Beach City. As a result quite a few riders not included in the official count were on hand during the festivities.

Arrangements had been made with the various amusement concessionaires of Venice, by the club committee, by which reduced rates were granted to everyone wearing the official ribbon of the club. Full advantage was taken of this concession, and during the day the different places of amusement were thronged with khaki-clad riders, and girls in tassel caps and divided skirts. The uniform of the motorcycle rider was the "open sesame" in Venice, for one day at least.

Promptly on time in the morning the signal to move upon Venice was given by "Jake" de Rosier, former king of the motorcycle track, who left the Crocker Street Hos-

pital for the first time after three months of suffering from injuries received at the Stadium, to lead the run as honorary captain. Seated in a big touring car, Jake waved a signal to the waiting riders, and gave the word which started the run on its way to Venice. Down Grand avenue to Pico street sped the automobile, and then out Pico to Crenshaw and Washington boulevards. For more than a mile behind the machine came a procession of motorcycles, those carrying tandems leading the way, while behind followed the single riders and side-cars.

A uniform speed of twenty-five miles an hour was maintained by the pacemaking car, which was driven by "Gal" Blaylock, president of the club. Arriving at Venice, the automobile sped straight on into the beach town, but the motorcycle riders were sent by a roundabout route and first made their appearance on the broad walk fronting the beach.

Arriving at Los Angeles, after a fine return trip, the riders again assembled at the club house on West Jefferson street, where the annual run was wound up with an outdoor picnic banquet, served under the trees in the yard at the rear of the club house. In the absence of the riders the committee in charge of the banquet had been busy, and when the call for "supper" was given, long tables laden with a simple but thoroughly substantial picnic supper bade welcome to the tired and hungry riders.

HEADED EASTWARD AGAIN.

VOLNEY E. DAVIS, the trans-continental record holder, who is on his way across the country by motorcycle once more, reported at Reno, Nev., recently after a three-day trip from San Francisco. Little or no trouble had been experienced and Davis and his companion, Lou Golding, looked forward to making good time on the next leg of their trip. Davis is not making an effort to lower his present record, and the journey is being made primarily for pleasure. On the way to Reno the riders went over the Placerville grade to Lake Tahoe, from there to Carson City and then to Reno.

LICENSE REGULATIONS.

SAMUEL C. PARK, mayor of Salt Lake City, Utah, has instructed Attorney P. J. Daly to prepare a new ordinance, requiring motorcyclists to carry numbers three inches in height, running lengthwise, on a black background. The plate must be fastened to the rear mudguard.

AIR MAN TURNS RACER.

EDDIE HOLSINGER, of Canton, Ohio, formerly a professional balloonist, has forsaken the air game to become a professional motorcyclist. He was given a try-out at the Luna board track in Cleveland recently and made good.

TOURING ENGLAND.

DR. HARRY COPLEY and son Howard recently left Joliet, Ill., on a motorcycle trip of several thousand miles. They expect to ride to Montreal and Quebec, sail for Glasgow, and tour in England, France and Egypt.

NOTES FROM NEWARK.

THE motorcycle as an adjunct to sports is coming into evidence more and more in Newark and vicinity every day. Visitors to Weidenmayer's Park find the little two-wheeler hitting up the road alongside of its more stately brother and carrying its baseball fan owner to the park for the afternoon game; it is used for quick transit to the country club golf links, for an afternoon's outing in the country and various other purposes. William Garrabrants and Joseph Murphy, of Newark, are two ardent disciples of Izaak Walton, who find the motorcycle indispensable in pursuit of their favorite sport. Early in the spring, just as soon as the trout streams are open for fishing, these two hike away up into North Jersey or over the line into New York State, looking for the place where the trout are biting best.

WORK on the lighting plant at the Valisburg Motordrome is expected to be started in a few days. No definite date has been set for the opening of the night racing, nor have the nights been selected. Manager Derkum says, however, that he is desirous of avoiding conflicts with other night sports, and it is possible that Tuesday and Saturday nights will finally be decided upon.

THERE was a gala time at the last meeting of the Jersey M. C. The occasion was the club's annual midsummer night's entertainment. There was a big turnout of members.

RACES AT IOWA FAIR.

THREE motorcycle races were conducted recently by the management of the Sac County fair, at Odebolt, Iowa. They resulted as follows:

4 h., stock, 5 miles: Bates, Excelsior, first; Dorr, Indian, second; Fogel, Indian, third. Time, 7:13.

7 h., stock, 5 miles: Dorr, Indian, first; Bates, Excelsior, second; Keir, Excelsior, third. Time, 6:35.

7 h., free-for-all, 10 miles: Dorr, Indian, first; Bates, Excelsior, second. Time, 13:6.

GOVE WINS AT BROCKTON

EARL G. GOVE, of Brockton, Mass., carried away the honors at the recent motorcycle races held in that city. He finished the 10-mile amateur race in 13:10. B. H. Swanson was second and Leon W. Luden, third. In the 15-mile trade riders' race the same order was maintained, Gove's time being 19 minutes.

TRINIDAD MOTORCYCLE CLUB.

THE Trinidad (Col.) Motorcycle Club has been organized with a membership of twenty. The following officers were elected: E. M. Broadwell, president; Sam Morse, vice-president; T. F. Kane, treasurer; Henry Abott, secretary. Charles Stevenson was chosen field captain and his two lieutenants are John Swinton and Charles Makloski.

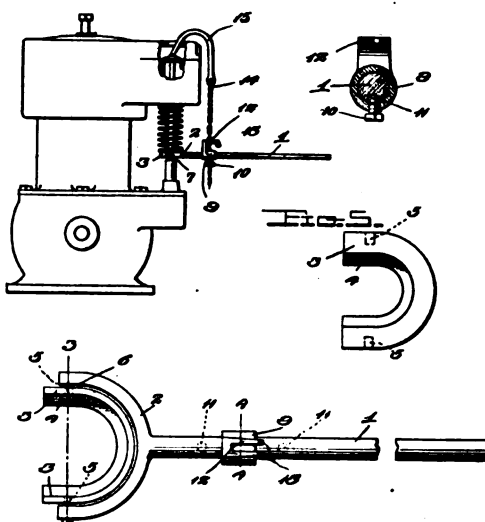
AFTER ECONOMY RECORD.

GEORGE EDER and George Snyder, of Reading, Pa., are en route on a 1,500-mile motorcycle journey to St. Louis and return. They expect to complete the trip on 25 gallons of gasoline—an average of 60 miles per gallon of gas.

FRANK BOYD, president of the Maryland Motorcycle Club, is en route on an extended motorcycle trip through England.

PATENTED VALVE SPRING REMOVER.

1,034,874. Valve Spring Removing Device. Patented August 6, 1912, by G. F. Clark, Daytona Beach, Fla. This consists of a forked rod and separate U-piece on which is fitted another U-shaped piece near the forked end.



A curved piece and chain attached complete the apparatus. For removing the valve spring, the separate piece pivoted within the forks of the rod is fitted to engage the lower end of the valve spring, and the curved upper piece is placed against the head of the valve and connected by the chain to the U-shaped piece as illustrated. On pushing down on the end of the rod the spring is lifted and the cotter or fastening device removed.



AUGUST GAINS IN F. A. M.

F. A. M. membership gains for August were as follows: Maine, unaffiliated, 3. New Hampshire, unaffiliated, 5; renewals, 1. Vermont, unaffiliated, 1. Massachusetts, affiliated, 15; unaffiliated, 6; renewals, 6. Rhode Island, affiliated, 1; unaffiliated, 6; renewals, 5. Connecticut, unaffiliated, 2; renewals, 4. New York, affiliated, 39; unaffiliated, 37; renewals, 28. New Jersey, affiliated, 9; unaffiliated, 8; renewals, 7. Pennsylvania, affiliated, 23; unaffiliated, 24; renewals, 16. Maryland, unaffiliated, 1; renewals, 1. Virginia, unaffiliated, 2; renewals, 3. West Virginia, affiliated, 6; renewals, 1. Delaware, unaffiliated, 1. District of Columbia, renewals, 1. Tennessee, renewals, 1. Georgia, affiliated, 1; unaffiliated, 1; renewals, 2. Florida, affiliated, 19; unaffiliated, 1; renewals, 3. Arkansas, renewals, 1. Texas, affiliated, 22; unaffiliated, 4; renewals, 5. Kentucky, unaffiliated, 3; renewals, 1. Oklahoma, unaffiliated, 1. Ohio, affiliated, 68; unaffiliated, 25; renewals, 42. Indiana, affiliated, 10; unaffiliated, 10; renewals, 10. Illinois, affiliated, 27; unaffiliated, 19; renewals, 17. Missouri, affiliated, 6; unaffiliated, 2; renewals, 2. Wisconsin, affiliated, 19; unaffiliated, 11; renewals, 5. Michigan, affiliated, 29; unaffiliated, 23; renewals, 6. Minnesota, affiliated, 49; unaffiliated, 1; renewals, 2. South Dakota, affiliated 1; unaffiliated, 1; renewals, 8. Nebraska, affiliated, 1; unaffiliated, 1; renewals, 3. Kansas, affiliated, 15; unaffiliated, 2; renewals, 2. Iowa, affiliated, 3; unaffiliated, 2; renewals, 1. California, affiliated, 41; unaffiliated, 4; renewals, 3. Utah, unaffiliated, 1; renewals, 1. Colorado, affiliated, 23; unaffiliated, 2; renewals, 27. New Mexico, affiliated, 14; unaffiliated, 2. Arizona, affiliated, 11; renewals, 2. Montana, unaffiliated, 1; renewals, 1. Oregon, affiliated, 4; unaffiliated, 1. Washington, affiliated, 44; unaffiliated, 1; renewals, 6. Canada, renewals, 1. Total, affiliated, 528; unaffiliated, 208; renewals, 225.

NEW F. A. M. CLUBS.

SECRETARY G. B. GIBSON reported new affiliated clubs, August 16-31, as follows: Ravenna M. C., Ravenna, Ohio; W. N. Beach, secretary, 165 Diamond street, 15 members, 100 per cent.; York M. C., York, Pa.; H. S. Bortner, secretary, 411 W. Market street, 15 members, 100 per cent.; Middletown M. C., Middletown, N. Y.; W. M. Mapes, secretary, 27 Mulberry street, 25 members, 100 per cent.; Sunshine State M. C., Albuquerque, N. Mex.; H. A. Douglass, secretary, Box 210.

THE REPAIR SHOP LIST.

REPAIR shops were added to Secretary Gibson's list between August 16 and 31 as follows: E. Runyan, Elwood, Ind.; Martin F. Murray, School street, Glen Cove, L. I., N. Y.; Stebbins & Geynet, Sachem Park, Norwich, Conn.; C. M. Snyder, 136 W. Pearl street, Jackson, Mich.; George Reisinger, 12

W. Tenth street, Anderson, Ind.; Buettner-Heinz Company, 504 State street, E. St. Louis, Mo.; Davoll & Wilmeth, 1531 "O" street, Lincoln, Neb.; Harry T. Johnson, 402 W. Central avenue, Albuquerque, N. Mex.; J. A. Nadcau, 219 West Gold avenue, Albuquerque, N. Mex.

JAPANESE RIDERS BUSY.

IN June Chairman Estabrook, of the F. A. M. membership committee, received a request from Tokio, Japan, for information which would assist the motorcyclists of the Mikado's city in the organization of a body along the general lines of the F. A. M., and all the available literature was promptly forwarded. A few days ago he received a letter from his former correspondent stating that the F. A. M. circulars and booklets afforded all the information necessary and that a national association of Japanese motorcyclists will no doubt result from the movement in which he has assisted. Brothers of the motorcycle fraternity who wish to drop a line of encouragement to the Tokio enthusiast may address him as follows: K. Utsunomiya, 7 Minamikinrokucho, Kyobashi-ku, Tokio. Simple enough, once the address is fixed in your mind.

F. A. M. SAYS "THANKS."

NATIONAL SECRETARY GIBSON has forwarded letters to the city officials of Columbus and the Columbus Motorcycle Club, thanking them in behalf of the F. A. M. for the cordial reception tendered the motorcyclists who attended the Federation convention in the Ohio capital.



A CLEVELAND VICTOR.

THE accompanying photograph shows Don Klark, the Detroit speedster, as he appeared after winning a spectacular race at the big meet of the Cleveland Motorcycle Club at Randall track on August 25. Kissig and several others made excellent showings, but Klark had something of a corner on the honors of the day. The photo is by Arthur M. Schnetzler, a Cleveland motorcycle enthusiasts.

SUGGESTS TRIPLE ALLIANCE.

SUGGESTING the drawing up of a working agreement between the two bodies, President K. R. Spencer, of the Canadian Motorcyclists' Association, has written an official communication to T. W. Loughborough, of London, England, secretary of the Auto-Cycle Union. Mr. Spencer has also approached the F. A. M. directorate on the same question and hopes for the establishment of a "triple alliance" between the three countries.

A BALTIMORE HUSTLER.

BALTIMORE, Md.—William Wood, the Maryland F. A. M. Commissioner, has been assured of reappointment by President Patterson and this reward of his arduous work in the past has stimulated Mr. Wood to get still busier and endeavor to treble the membership from Maryland in the national organization.

VICE-PRESIDENTS NOTIFIED.

NATIONAL SECRETARY GIBSON, of the F. A. M., has communicated with the retiring vice-presidents of the old Federation districts, formally notifying them of the change in government of the body and thanking them for their efforts in behalf of the organization during the last fiscal year.

IN NEW OFFICE.

SECRETARY G. B. GIBSON reports having moved into his new offices, where he is much better fitted to handle F. A. M. business, owing to additional room and greatly improved lighting facilities.

READY FOR PARADE.

MEMBERS and friends of the Englewood Motorcycle Club, of Chicago, will participate in a lantern parade on September 7, starting from the club's headquarters at 8 p. m. The decorated machines will travel north on Michigan avenue to Thirty-third street, east to the various boulevards and finally to the beach just south of the German building, where a marshmallow roast will be held. Other light refreshments will be served, and there will also be a program of games.

MOTORCYCLISTS ARE BARRED.

MOTORCYCLISTS in Atlanta, Ga., are waging a spirited campaign with a view to having the Piedmont Park track thrown open to them. The Park Board has placed a ban on automobiles, motorcycles and bicycles as far as the track is concerned, and when the Atlanta boys wanted to hold a race meet recently they were forced to stage their races at Rome, Ga. A formal appeal has been made to the city officials.

MOTORCYCLE races are now being held in Cape Town, South Africa, and reports say the meets are well attended.

AMONG THE CLUBS

CANADIANS ARE BUSY

C. M. A. Territory is Divided into Five Districts and Regulations Are Being Framed.

TORONTO, Can.—The Canadian Motorcyclists' Association is gradually taking definite shape, recent meetings of the officers having resulted in the working out of a number of important details. The jurisdiction of the organization has been divided into five districts, as follows: British Columbia, Manitoba, North Western Provinces, Ontario, Quebec and the Maritime Provinces. Organization work is being carried on in each of these districts with apparent results.

It has been decided to hold the annual meetings in midwinter instead of during the "open" season, to insure a better attendance of delegates and more interest. It is intended to hold the annual assembly between November 1 and January 1 of each year and the next convention is to be held at Toronto. Private promoters will be charged a sanction fee of \$25 for race meets while that for clubs will be \$10. Any society or lodge putting on one or two races at a picnic or celebration is to be classed as a club.

Affiliated clubs will be allowed representation at general meetings as follows: Clubs with from 10 to 50 members, one delegate; from 50 to 100 members, two delegates; for each additional 100 members, or fraction thereof, one extra delegate. Notices for general meetings will have to be sent out not less than 15 nor more than 30 days prior to the date of the gathering. A press bureau is to be established and a system for keeping the directors informed of all business has been adopted.

W. J. Tite, of London, Ontario, Chairman of the Legal Action Committee, has been instructed to take up the matter of a working agreement between the F. A. M. and the C. M. A., and to communicate with the Auto-Cycle Union of Great Britain with regard to the establishment of mutual relations.

The Hamilton Motorcycle Club has donated to the association a handsome trophy to be emblematic of the National championship of the association. Nelson Chambers has been appointed chairman of Memberships for the coming term.

EIGHT ROUTES COVERED.

EIGHT out of nine rural mail routes, extending from the Princeton (Ill.) post office, are being covered by motorcycle, the ninth by auto. Country dwellers receive their mail as soon as the city folks and it is claimed that all the carriers are back by 11 a. m. None of the routes is less than twenty miles long.

BALTIMORE TOURISTS.

PRESIDENT FRANK BOYD, of the Maryland Motorcycle Club, of Baltimore, is back home after a long tour through the New England States, New York and New Jersey. Roger Wilkens and Ed. Rasmers are also back from their trips, and both are well pleased with their machines. Their trip covered nearly 1,000 miles.

READING CLUB MEDALS.

MEDALS were awarded to the following twelve members of the Reading (Pa.) Motorcycle Club, who finished with perfect scores in the annual endurance run: Daniel Hart, James Mayo, William Buel, Samuel Killian, P. Maurer, Jacob Deysher, William Staudt, Samuel Nye, William Henry, James Dunkle, Ezra Hartman and Benjamin Pike.

The club presented John H. Hull, of Mt. Hope, who entertained members of the club on two occasions, with a gold watch fob. The charm is an F. A. M. emblem.

TORONTO VAN OUTFIT.

THE van outfit shown in the photograph is in use by a wholesale house in Toronto, Can. The firm uses several motor trucks, but finds that for comparative efficiency and economy the motorcycle has



a long lead. The outfit is used principally for rush orders that have to be carried into the suburbs. Stephen Wilkins, 151 Winchester street, Toronto, forwards the picture.

IN order to cut down expenses the Bernardino (Cal.) Motorcycle Club has decided to dispense with its present clubrooms until next spring.

A MOTORCYCLE CARNIVAL

Hundreds of Riders Will Masquerade as Indians During Big Annual Fair in San Jose.

HUNDREDS of motorcyclists of San Jose, Cal., and vicinity have completed arrangements to participate in the annual county fair celebration to be held in San Jose, and on September 9 they are to invade the city on their machines, costumed as Indians. There will be more warriors, squaws and squawlets riding through the city streets than the old place has seen in many a day, and the motorcycle carnival promises to be one of the most spectacular features of a remarkable program. The county fair management has offered valuable prizes for the motorcyclists who present the best makeups. One will go to the most chief-like Indian and another to the most squaw-like squaw. Other prizes will be awarded for attractively decorated machines.

Motorcycle racing events will be pulled off during the presence of the costumed visitors and another feature during their presence will be a big parade through the town, in which it is expected that 2,000 riders of motorcycles will participate.

All the motorcycle and automobile racing events, it has been decided, will be run between Saturday, September 7, and Monday evening, September 9. On the latter day the Indians will be one of the chief attractions. Two open-to-all motorcycle events in heats will give the motorists ample opportunity to win prize money and trophies.

LORAIN'S FOUR-RUN SERIES.

SO far several riders have perfect scores in the four-run series which is being conducted by the Lorain (Ohio) M. C., and there are indications that the final trial, scheduled for the first Sunday in December, will find a squad of the riders contesting desperately for first place. The trophy is a handsome loving cup which was donated to the club by Doctor Webster, who, until a few days before his death several months ago, was the most active worker for the advancement of the organization. The first run was held on the first Sunday in March, the second on the first Sunday in June and the third on September 1. The club aims to carry out the plans exactly as they were outlined by Doctor Webster.

NO TIME LOST.

TWO cities are already after the 1913 meet of the F. A. M. Columbus, the host of the last meeting, is anxious to fill the role another time, while Toledo, O., through the chamber of commerce, has put in a "bid" for the next convention.

UTICA RIDERS ON FLOAT

Novel Motorcycle Display Was a Feature of Big Sherman Notification Parade.

MEMBERS of the Utica Motorcycle Club figured prominently in the carnival parade incident to the Sherman Notification Day celebration which was held in Utica, August 20 and 21. As Utica is the home city of the Vice-President the townspeople felt called upon to let out a notch in their enthusiasm, and the program was a most effective one.

The motorcycle display took the form of a float which was built on a huge automobile truck. It was decorated with bunting in the national colors, flags and club pennants, and on either side was a large sign bearing this inscription: "The Utica Motorcycle Club is a Utica Booster too. Safe, Sane and Quiet-Riding." The float was occupied by members of the Utica M. C. with their wives, daughters and sweethearts and the presence of the ladies did much to give an air of dignity and conservatism to the club's display. The phrase "Safe, sane and quiet-riding" also attracted attention, for the Utica riders have been well to the fore of late in the campaign to discourage indiscriminate use of muffler cut-outs.

The float idea for a motorcycle club is a new one, and the Utica squad and clubs in neighboring cities intend to make use of it whenever an opportunity presents from now on. It obviates the troubles met with in motorcycle carnival parades, where the procession usually moves so slowly that riders are forced to race their engines free and make frequent stops.

HERE IS "SOME GOING."

RALPH HOBBS, of Hobart, New Mexico, says his motorcycle has outclassed the greyhound for hunting jackrabbits. Hobbs' first experience in that line was when he was riding along the road and a jackrabbit ran ahead of him. Hobbs let his machine out but the rabbit loped along at a moderate gait, easily keeping out of the way.

Finally Hobbs opened his throttle and ran up close to the jack. Then the rabbit got down to fast work, just making a streak along the dusty road. There was no fence at either side, but the jackrabbit was running so fast that it could not turn aside. Hobbs continued to gain, and in three hundred yards ran over the animal, crushing it to death. Since then Hobbs has raced a number of jackrabbits, overtaking each one. He admits, however, that they can put his machine up to its best work.

ELEVEN motorcyclists of Northampton, Mass., recently visited Worcester and Shrewsbury, Mass., on a Sunday run.

MEMBERS of the Dayton Motorcycle Club recently made a run to Cincinnati, Ohio, to attend a picnic given by the Queen City Motorcycle Club.

EDWIN PAXTON, of 25 West Fayette Street, Baltimore, Md., rode from Port Penn, Del., over sandy stretches to Baltimore in seven hours, on his Indian 7.



H. P. Yonkers.

IOWA CHAMP HURT.

IOWA'S champion motorcyclist, H. P. Yonkers, of Cedar Rapids, was injured recently while racing with a rider named Bates at the Boone track. He is now doing nicely, but will not be able to enter any more events this season. Yonkers was a full fifty yards ahead when he skidded at a turn and fell; Bates was unable to avoid hitting him. He was carried to the Boone hospital in an auto, where he was confined for two weeks. Yonkers has won seventeen events straight this season on his "Green Tank" Indian, a special 4 h. He is well liked and is the best known rider in the state.

CHICAGO TO OMAHA.

DAVID M. Kalbfell, 1120 Wolfram Street, Chicago, Ill., and his sister, Miss Lulu Kalbfell, expect to complete a 1,500-mile motorcycle trip from the Windy City of Omaha, Neb., some time this week. Stops were made at Rockford, Ill., DuBuque, Ia., Waterloo, Neb., Mason City, Neb., and Minneapolis, Minn. They are riding tandem.

ILLINOIS RIDERS ON MISSOURI TRIP

Four Quincy Enthusiasts, Mapping Run for Prospective Club, Learn That Path-finding Often Has Its Drawbacks

By JOSEPH ESLER

AS the boys were going to form a local motorcycle club, with the intention of affiliating with the F. A. M. after the club was on solid footing, four of us decided to do a little scouting and lay out a trip or two for the club to take later in the season. The party consisted of: Oscar Kathman, a local dealer; Don Castro, the smallest and one of the nerviest riders in town (by the way Don says he is only fourteen); Will Kidson and the writer.

Castro's Machine Disabled.

We trailed out on the road in Indian file and about six miles out, the writer found Castro at the side of the road, with the front fork of his machine very badly twisted. An automobile filled with people stood a few feet away, and Castro explained that he either skidded into the auto or the car bumped into him; he wasn't sure which. All that could be done was to hire a farmer's wagon to take the damaged machine back to the city.

However, Don wasn't going to be deprived of the trip by a little thing like a damaged machine, so Kathman took him astride his tank and we reached Hannibal in this fashion. The going was certainly rough, sand, stones and ruts all combining to make it a hard trip. The road was so bad that I shook the generator off my lamp and to make a good job of it ran over it before I could stop the machine.

Too Late to Hear Bryan.

No sooner had we reached Hannibal than Kidson's front tire lost its air and we found a very sharp thorn had penetrated his casing. A repair was finally made and, accompanied by some of the Hannibal motorcycle boys, we decided to run over to Palmyra, about fifteen miles to the west, and hear William Jennings Bryan make a speech.

We had to do a little hill climbing, but this was play for our machines. We arrived in Palmyra all right, but too late to hear the "Peerless One."

Puncture and Chain Trouble.

It was about eighteen miles to Quincy. A few miles out we met a rider by the name of Henry Fields, who was having chain trouble. We fixed him up and he joined the procession.

We were sailing up and down the hills, but had to slow up often, as it seemed every horse we met was fractious, and we were careful not to cause any runaways. We had to ford a small creek and the next accident befell Kathman, who got a puncture. Then Fields had more chain trouble. In the meanwhile the writer was having his own troubles, as I went on my way with no light, and darkness was rapidly coming on. All was well until I hit a little hamlet called Taylor, noted for the beginning of a very rough bottom road.

At last the lights of Quincy gleamed in the distance and when I rode onto the bridge that spans the Mississippi there I was rewarded with a beautiful view of the "Gem City." The majestic moon casting its silvery beams over the mighty river was a fine picture indeed.

Back Home at Last.

I reached home about 8 o'clock, pretty well shaken up and tired out. The rest of the bunch came trailing in, until Kidson showed up at 9.30, tired out but happy to be home again.

On the next trip the boys are going up the river about forty miles to Keokuk, Iowa, to catch a glimpse of the huge dam and power houses, costing over \$25,000,000, which will harness the power of the "Father of the Waters" and by transmission lines send it to St. Louis, Mo., one hundred and seventy-five miles away.

Holiday Race Meets

BOYD CORNERS THE HONORS.

DENVER, Col., September 2.—A fine program of races was pulled off at Tuilleries Park on Labor Day, consisting of a long-distance event and two short match races. Boyd was the star of the day, taking down two firsts, while Cox came in for the third victory. Boyd led in the twenty-five mile event for the entire distance. He jumped out and took a good lead in the first ten miles. Cox, who was in a badly crippled condition from his spill of the day before, put up a game race all the way through and finished second.

Richards was hanging right with the bunch until the sixth mile, when his rear tire blew up and eliminated him from the contest. Bowen had trouble with his engine all the way through and was forced to leave the track once more to make repairs. He again entered the race and had succeeded in covering 20 miles when Boyd finished. The 5-mile match race between Cox and Boyd kept the crowd on their feet all the time, first one and then the other having the best of it. In the final lap, however, Boyd gained a slight advantage, which he carried with him to the tape. The 3-mile match race between Cox and Richards was one-sided in favor of Cox, who jumped out from the start and stretched his lead into almost a lap at the finish. Summaries:

25-mile open professional, 61 class—"Slivers" Boyd (Indian); Jim Cox (Merkel); L. E. Bowen (Merkel). Time, 18:01½.

Five-mile match race, professional, 61 class—"Slivers" Boyd (Indian); Jim Cox (Merkel). Time, 3:40½.

Three-mile match race, professional, 61 class—Jim Cox (Merkel); Richards (Indian). Time, 2:11½.

SPRINGFIELD (O.) RACES.

SPRINGFIELD, Ohio.—Eight good events were witnessed in the motorcycle meet at the Labor Day celebration on the Fair Grounds today. Several thousand people were in attendance and the program met all expectations. Summaries:

Two-mile race, 30.50 machines—Remmeter (Flying Merkel), first; Hicks (Indian), second; Wilkins (Thor), third. Time, 2:47½.

Four-mile race, 30.50 machines—Remmeter (Flying Merkel), first; Wilkins (Thor), second; Brown (Flying Merkel), third. Time, 5:42½.

Pursuit race, ten and half miles—Remmeter (Flying Merkel), first; Hicks (Indian), second; Strong (Emblem), third. Time, 15 minutes.

Three-mile race, 30.50 machines—Hicks (Indian), first; Remmeter (Flying Merkel), second; Gast (Excelsior), third. Time, 4:28½.

Four-mile race, belt drive—Strong (Emblem), first; Gast (Excelsior), second; Remmeter (Flying Merkel), third. Time, 5:57½.

One-mile novelty—Hicks (Indian), first; Wilkins (Thor), second; Remmeter (Flying Merkel), third. Time, 2:26½.

Five-mile race, 5 h. machines—Hicks (Indian), first; Remmeter (Flying Merkel), second; Wilkins (Thor), third. Time, 7:01½.

Ten-mile race, 5 h. machines—Remmeter (Flying Merkel), first; Hicks (Indian), second; Lubbers (Indian), third. Time, 13:34½.

FORT WAYNE MEET.

FORT WAYNE (Ind.) motorcyclists witnessed a high-class race meet on Sunday, September 1, when such well-known speedsters as Don Klark, "Shorty" Matthews, Evans and Long figured in the events. Evans spilled in the third race, but was able to compete in later events. A 50-mile grind was the feature of the card. In this race Klark broke the track record by turning off his twenty-first mile in 48½. Walter Kiel, a local amateur, finished in second place. Matthews was forced out of the 50-mile event by magnet trouble.

COX IN BAD SPILL.

DENVER, Col., September 1.—An excellent program of races was presented at the Tuilleries Motordrome Sunday afternoon. The races were all hotly contested and the finishes extremely close. "Slivers" Boyd got away with the honors of the day by winning two races, while "Curly" Fredericks and Eddie Swartz each got one. The Australian pursuit race was an easy victory for Fredericks, who overtook Cox in the third lap of the second mile. In the invitation race "Slivers" Boyd jumped out in the lead with Cox close behind. After a few laps had been covered Fredericks pulled up alongside of Cox and had just got half his machine past when he cut down the track, throwing Cox's front wheel from under him. Cox quit his machine, sliding on his back and shoulders to the running board and then rolling over and over some 100 feet from the point where he fell. Cox's bruises were many but not serious, his body being filled with hundreds of small slivers. Clever riding on the part of Boyd brought him across the tape a few inches to the good over Fredericks.

The match race between Fredericks and Swartz was of the whirlwind variety, with neither having the advantage until the last lap, when Swartz slipped past and won by a slight margin. After the race was over Fredericks resented the remarks of the referee about his rough riding tactics and was given a 10 days' suspension. The program closed with a match between "Slivers" Boyd and L. E. Bowen, which was very interesting. Boyd gained a slight lead in the last lap, which he maintained to the finish. Summaries:

Australian pursuit race, professional, 61 class—Fredericks won over Cox after covering two miles and two laps. Time, 2:02½.

Five-mile match race, professional, 61 class—Ed Swartz (Excelsior); Curly Fredericks (Excelsior). Time, 3:31½.

Five-mile invitation, professional, 61 class—Slivers Boyd (Indian); Curly Fredericks (Excelsior); L. E. Bowen (Merkel). Time, 3:32½.

Three-mile match race, professional, 61 class—Slivers Boyd (Indian); L. E. Bowen (Merkel). Time, 2:19½.

MARION'S HOLIDAY MEET.

FOLLOWING are the summaries of the races held by the Marion (Ind.) M. C. on Labor Day:

Ten miles, open—Heckman, first; Creviston, second; Hardwood, third. Time, 14:20½.

Five miles, open—Creviston, first; Shaffer, second; Heckman, third. Time, 6:39½. Sudduth fell on the backstretch in the second lap, machine and rider turning two somersaults. Close race throughout between Shaffer and Heckman.

Five miles, stock—Heckman, first; Hagan, second; Shaffer, third. Time, 7:01.

Ten miles, for Grant County championship—Hardwood, first; Miles, second; Scott, third. Time, 14:24. Half-hour race—Creviston, first; Shaffer, second; Heckman, third. Distance, 22½ miles for Creviston. Attendance, 2,500.

HUTTINGER'S MACHINE ABLAZE.

CLEVELAND, Ohio, August 25.—In the miss-and-out event at the Luna bowl today Finn Huttinger's machine was destroyed by fire. Huttinger himself escaping injury. The feature race was won by Charlie Glenn, of Toledo. Brownie Carslake took first money in the nine-mile professional and Gibson won the ten-mile event. Henikman won over Huntsberry in the amateur event.

NORMAN BENT, of Green Bay, Wis., recently won first place in five out of six events on the Oconto track.

AMATEUR RIDER HURT.

NEWARK, Ohio, September 2.—Harry Horschler, an amateur rider, sustained a broken leg in the third event of to-day's races. This event was unfinished. The summaries:

Ten-mile club championship—Harry Horschler (Indian), first; Walter Kushmaul (Indian), second. Time, 14:10½.

Five-mile, stripped stock—Harry Horschler (Indian), first; Walter Kushmaul (Indian), second.

Ten-mile, stripped stock machines—Walter Kushmaul (Indian), first; McGough (Harley-Davidson), second. Time, 14:25.

Five-mile, belt driven machines—Charles McGough (Harley-Davidson), first; Francis (Harley-Davidson), second. Time, 7:42½.

Three-mile novelty race—Kushmaul (Indian), first; Francis (Harley-Davidson), second. Time, 5:27½.

One-mile trial—Kushmaul (Indian), first. Time, 1:2. McGough (Harley-Davidson), second. Time, 1:28½.

FREDERICKS SWEEPS BOWL.

DENVER, Col., August 26.—"Curly" Fredericks, the local rider, jumped into prominence today by winning every event in which he competed. The only race in which Fredericks was not entered was won by Boyd. He nosed out Cox in a fast finish. In the first event the starter discovered a small piece of board on the track and flagged the riders. They argued that they were in no danger and the prize money was divided according to the positions the contestants occupied when they were flagged. The match race between Cox and Fredericks was "pie" for the latter.

The last race, while not at all close, was extremely interesting to the spectators. Swartz had lost considerable ground in the first two miles on account of engine trouble, but had got righted again and was gradually closing up on Cox who was in second place. Fredericks had jumped out from the start and was increasing his lead with every lap. The questions in the minds of all were: Would Fredericks lap the bunch and would Swartz take second place from Cox? Just as the tape was reached the three riders were in a bunch.

KLARK WINS A GRIND.

CLEVELAND, Ohio, August 25.—At the North Randall track fully 2,500 people were present today to see the races. Don Klark set a new 100-mile dirt track record, making one stop for gasoline and oil. Baker, of Indianapolis, made the distance without a stop, and came in second. Kissig was third. In the five-mile novice event Lawrence came in first, with Quackenbush a close second. Tracy defeated Kissig in the 30:50 Club Championship event, but Kissig was the victor in the 61:00 class.

A protest was registered by William Lister against the winning Indians and after the machines were taken to the establishment of L. J. Mueller, Referee McConnell and other officials took down the motors. It is stated that several of the machines were found to have drilled pistons and Referee McConnell will obtain a final ruling from Chairman Thornley before deciding whether these conditions constitute a breach of the regulations.

ANOTHER TRACK RECORD.

PEORIA, Ill.—Only time trials took place here Labor Day. Mike Cafferello, of Chicago, on a seven Indian, broke the track record, making the distance in 52 1-5 seconds, bettering the record made by Joe DeSalvo, also, of Chicago, by five and four-fifths seconds.



Band on parade through the park before the Riverview races.

RACES AND BARBECUE

**Members and Friends of the Chicago M. C.
Enjoy a High-Class Program at
the Riverview Motordrome.**

THERE was a big turnout of riders at the race meet and barbecue of the Chicago Motorcycle Club at the Riverview Motordrome on Sunday, August 25. Members and friends of the club formed a procession at the headquarters and rode to the motordrome, headed by the officers who carried a large club banner. After the barbecue, which had been in course of preparation since the night before, the riders witnessed a fine racing program.

John Constant, the speedy Brooklynite, carried off the honors for the day, including the Riverview Cup, in the 6-mile event. Court Edwards attracted much attention with a unicycle on which he rode an exhibition mile in 5:25½. The card closed with a half-hour race, which was won by Constant. Summaries:

Six miles, cup race, stock 61.00—Constant (Indian); Mason (Indian); Hamilton (Indian). Time, 5:25½.
Two miles, stock, 30:50—Wenk (Thor); Bethke (Thor); Mitchell (M. M.). Time, 2:00½.
Exhibition mile—Edwards (unicycle), 5:25½.
Three miles, open, 61.00—Constant (Indian); O'Loughlin (Indian); Mitchell (Eagle). Time, 2:09½.
Stock 61.00, first heat, two miles—Mason (Indian); Shaw (Indian); Bethke (Thor). Time, 1:46½.
Second heat, two miles—Hamilton (Indian); Wenk (Thor); Rider (Indian). Time, 1:53½.



Pres. Hill presenting cup to Constant.

Final heat, two miles—Mason (Indian); Hamilton (Indian); Shaw (Indian). Time, 1:43.
Mile time trials, professional—Humiston (Excelsior), :40½; Wolters (Excelsior), :40½; Balke (Indian), :41.
Half-hour race, stock 61.00—Constant (Indian); Mason (Indian). Distance, 34 miles, 2½ laps.

HASHA STILL WINNING AT BRIGHTON

BRIGHTON BEACH, August 29.—Eddie Hasha added another race to his long string, tonight, winning the Bradhurst 6-mile handicap race at the Brighton Motordrome. Hasha allowed his competitors liberal handicaps, each man having a lap and 200 yards. He caught the field on the fifth mile and loafed along to within 100 yards of the finish. He then opened up for a final sprint and won, with yards to spare. Ferdie Mercier, of Brooklyn, finished second, and Herbert Ayrault, of Newark, third.

The 5-mile race went to George Lockner, of Syracuse, after three exciting heats. The riders were bunched most of the distance in each heat. Billy Shields, also of Syracuse, carried off second honors, and William Wray, of Brooklyn, was in third place. Herbert Ayrault made his debut as a professional rider in the second heat of the 5-mile professional race. He put up a very creditable perform-

ance, winning second place in his initial heat and finishing third in the next heat.

Ferdie Mercier, the Brooklyn flyer, has earned the distinction of being a consistent winner. He won each heat of the three-cornered match race, defeating George Hamilton, who was second, and Earle Eckel, who finished third.

The match race of the evening was between J. B. French and Ira M. Vail, who made his debut as an amateur. Vail was not expected to show good form, as he was inexperienced and had just received his machine from the factory. He, however, upset the calculations by winning the second and final heats in easy fashion.

BRIGHTON BEACH, August 24.—Harry Hamilton, of Newark, N. J., broke into the limelight at the Brighton Motordrome by winning the feature events of Saturday night's

program. In a special 13-mile match race with Billy Wray he won the first heat by half a length. In the second heat he was forced to retire with a broken exhaust valve and Wray finished alone. In the final heat Hamilton won by a wheel's length.

The speediest talent of the track was arrayed against Arthur Chapple in the 9-mile "Highlander" handicap. Hamilton, Wray, Mercier, Lockner and Cox each had two laps. Mercier and Cox retired in the first mile with carburetor trouble. Chapple gained the lead on the first lap and set out to cut down the handicap. Chapple caught the field on the sixth mile, gaining one lap. He tried desperately to get the second lap, but failed by a third of a lap. Hamilton, Lockner and Wray rode bunched the entire distance and finished in that order.

Johnnie Albright, the Denver flyer, threw the oil on Mike Costello in straight heats in their special 4-mile match race.

Ferdie Mercier and George Lockner tied for honors in the 5-mile open professional events. Mercier won two heats in handy style, while Lockner finished first, second and third in the three heats. In the second heat Mercier had a narrow escape from injury when his handlebars broke. He skilfully guided his machine with one hand and retired from the heat.

BRIGHTON BEACH, August 25.—Arthur Chapple, the local speed king, went down to defeat in the 30-mile race tonight when George Lockner flashed across the finish line a lap ahead of the field.

The 5-mile professional race was productive of an odd coincidence. Johnny Cox, Mike Costello, Ferdie Mercier and Billy Wray finished in that order in each of the three heats, and Cox lowered the time one second in each heat. Cox had to ride his utmost to win each heat.

A new feature was added at the track tonight, namely, a three-cornered match race. George Lockner, Harry Hamilton and Earle Eckel, who made his first appearance, faced the starter. Lockner carried off the honors, winning two heats and finishing second in the other. Eckel made a promising showing, finishing first, second and third in the three heats.

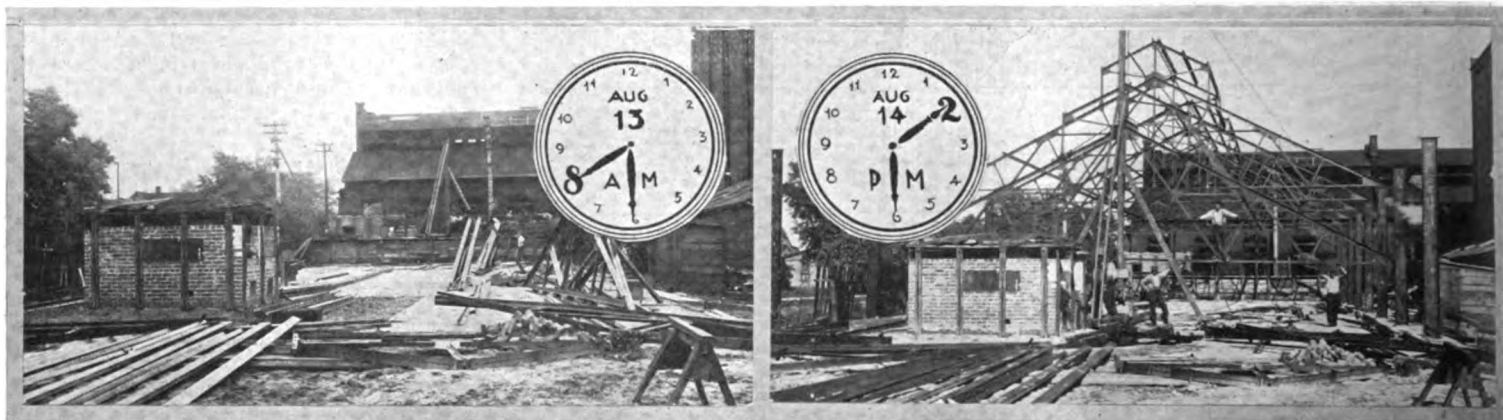
BRIGHTON BEACH, August 27.—Ray Peck defeated Johnnie Albright with ease in the feature 3-mile race at the Brighton Motordrome tonight, capturing the race in straight heats.

PORTLAND RACES.

RACES scheduled for Labor Day in Portland, Ore., were postponed because of unsettled weather. Racing programs are to be given at Vancouver, Wash., September 10 and 15.

THE "MASCO" CATALOG.

ALL standard accessories and supplies and not a few novelties are listed and illustrated in an attractive catalog which is being distributed by the Motorcycle Accessories Company, of St. Paul, Minn. The line ranges from cement to saddles and motorcycle clothing, and every article bearing the Masco stamp, the company's trade mark, is guaranteed to give maximum returns with the smallest reasonable outlay. The catalog will be forwarded promptly on application.



SAMPLE OF TOLEDO SPEED.

THAT folks in Toledo, Ohio, take no chances on having the proverbial grass sprout beneath their sandals has long been acknowledged, but something new in the way of an activity record was established recently by the Consolidated Mfg. Co. when it became necessary to add another building to the already spacious Yale plant. The new structure is to be set aside for the production of bent parts for motorcycles, bicycles and automobiles, and the contractors were notified that the extra room was needed badly.

The material, mostly ironwork, arrived on the ground at 8:30 a. m. on August 13, and at 2:30 p. m. on the following day the frame of the building was practically complete. The two accompanying photographs show the scene "before and after."

A VAN CLEEF EXTENSION.

VAN CLEEF BROTHERS, the Chicago manufacturers of high grade rubber and leather cements, announce that they have found it necessary to build a large addition to their factory at 7707-7711 Woodlawn avenue, and that their output for 1913 will be about doubled. Up to July 1 the firm's sales were 80 per cent. larger than in 1911 and since July 1 the business has been running even further ahead of last year's showing. Van Cleef agents report from all sections of the country that the outlook for 1913 in the motorcycle as well as the automobile supply field is so far beyond anything previously noted that a comparison is out of the question.

"MAKING RIDERS" THE SLOGAN.

MELROSE, Mass., has a unique motorcycle agency at 543 Main street, that city. This progressive concern is the Melrose Motorcycle Agency, who are agents for the Henderson machine. Although this make is the chief one, other motorcycles are handled, and attractively-worded cards are put in the window with the cut of the machines attached. Arrangements are made with neighboring dealers so that the agency can supply any American make at the customer's order, if they do not have it on hand. Machines are shown in the windows from time to time, and this plan is along the general lines of the company's slogan, "Make riders."

Where second-hand machines are concerned, the cards read "Tell us how much you can pay and we will bring to your door the best machine for the money." With the Henderson machine fitted with side-car, an insurance policy against fire, theft, etc., is included in the equipment price.

CANADIAN SEASON OPENS

Fine Motorcycle Display at Dominion National Fair Brings Some Early Business.

TORONTO, Can.—The inauguration of the 1912-1913 season of motorcycle shows took place at Toronto during the two weeks, August 26 to September 7, on the occasion of the holding of Canada's National Fair, the motorcycle display occupying one whole section of the Transportation building.

Seven different lines of motorcycles were shown, the exhibits including the Indian, Excelsior, Pierce, Triumph, P. E. M., Humber and Motosacoche. Two of these the "Detroit Triumph" and the P. E. M., were being shown to the Canadian trade for the first time. A. Shuttleworth, a Toronto dealer, has landed the Ontario agency for the P. E. M., while Walter Andrews, of Toronto, the Canadian bicycle champion, was showing the Triumph. To distinguish the classy-looking mount from Michigan from the English product of the same name, the Dominion trade has christened the new brand "the Detroit Triumph" and the name is taking well. Several English side-cars occupied prominent positions in the booths, these being the center of much interest from the thousands of American visitors to the big fair.



A MEDFORD DEALER.

E. S. BACON, of Medford, Mass., agent for the Harley-Davidson machines, is a full-fledged booster who is making the most of a rapidly developing field. The accompanying picture shows him intently reading the latest issue of MOTORCYCLE ILLUSTRATED. "I was ready to make a hurried business trip when the paper arrived," writes Bacon, "but could not break away until I had looked over the ILLUSTRATED."

A large number of the big men of the Canadian motorcycle fraternity gathered in the city for the "spread." H. W. Kipp, the Indian salesman for the Dominion, returned from a three months' business tour of the country just in time to devote his attention to the show, while a far-off visitor was W. E. Burke, the M. M. and P. E. M. dealer of Moose Jaw, Sask., formerly of Toronto and a retired bicycle champion. K. R. Spencer, of Hamilton, president of the C. M. A., was among the out-of-town delegation and his presence was made use of for the holding of a C. M. A. directors' conference.

The accessories department formed a noteworthy feature of the exhibition. All the tire makers, including the Goodyear, Diamond, Goodrich, Dunlop, North British and United States companies were fully represented, while Red Head spark plugs, Bosch magnetos and Standard speedometers were displayed by their Toronto distributors.

Toronto motorcycle dealers secured a number of fresh 1913 sub-agencies. Percy A. McBride, the Excelsior salesman, landed Carter & Company, of Niagara Falls, Ontario, for the Chicago mount, and incidentally sold a twin seven Excelsior to the Niagara Falls Park Commission for inspection uses.

The announcement was made that the fourth annual motor show for Montreal, Quebec, will be held during the week of January 4, while the Toronto show will follow one month later.

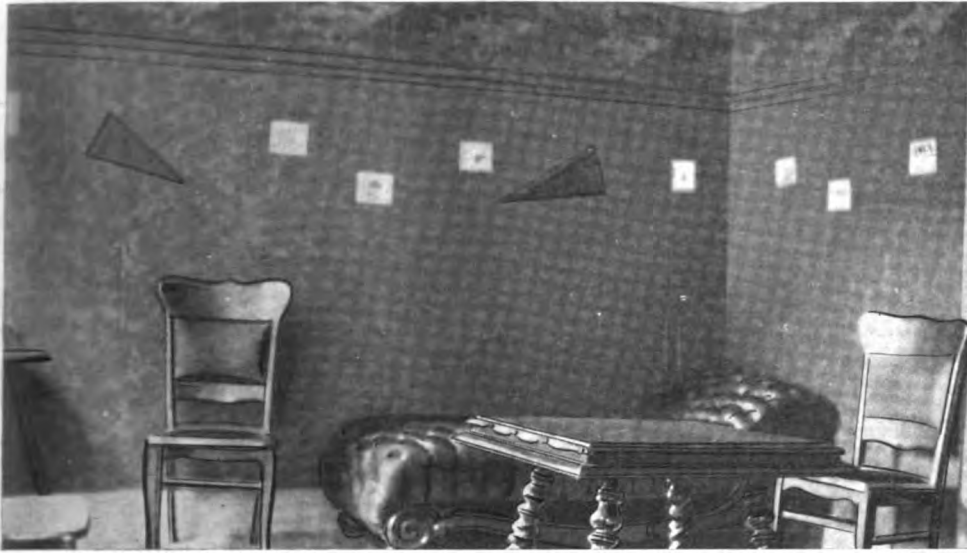
In view of the attractiveness of the motorcycle display at the Exposition, the sociability tour of the Toronto Motorcycle Club, planned for Saturday, Sunday and Monday, August 31 to September 2, was called off. The run is to be held at a later date. It had been intended to ride from Toronto to Windsor and return, a total distance of 500 miles.

The show of motorcycles at the fair formed another big incident in the annals of the Canadian trade, thousands upon thousands of visitors swarming through "Motorcycle Row" during the two weeks. Considerable business was accomplished, a big start being made, in a number of cases, on the transactions for next year.

PLACING EARLY ORDERS.

PHILADELPHIA, Pa.—The Excelsior, Philadelphia's pioneer motorcycle house, has contracted for more than 200 machines to be delivered early in 1913. So far this season 195 machines have been sold at the establishment and the management states that the number could easily have reached the 500 mark had the supply been up to the demand.

HAL P. DAVIS, a motorcyclist of Phoenix, Ariz., rode from Los Angeles, Cal., to Chicago, recently, with little or no trouble.



RIVERSIDE MOTORCYCLE GARAGE.

HEREWITH are shown views of the Riverside Motorcycle Garage, 533 West 110th Street, New York, a description of which appeared in the August 8 issue. The comfortable fittings of the club-room are the admiration of the many visitors to Coughlin's establishment, not to

mention the patrons of the garage itself. One of the rigid rules of the Riverside Garage is that clean towels and ample washing facilities shall be available at all times, and this alone goes a long way toward the ideal in a motorcycle station. It might be also called a "universal" garage, as five side-car outfits have made it their home in addition to two-wheelers.



NEW CLUB HOLDS RUN

Fifty Riders Enjoy First Outing of Recently Organized Indianapolis M. C.

INDIANAPOLIS, Ind.—The newly organized Indianapolis Motorcycle Club, under the leadership of O. F. McClain, president and tourmaster, took its first run on Sunday, August 25, to Noblesville, and return. Fifty riders made the trip, which was a very successful one. The roads were in great condition and as Noblesville is but 26 miles from Indianapolis, the complete round trip was made in the morning. The start was made in front of the club's temporary quarters on the Circle at 9 a. m., and when the riders lined up President McClain handed each one a yellow ribbon on which "Indianapolis Motorcycle Club" was printed.

Nearly all of the riders were members of the club, although the organization extended an invitation to riders in general to join them. There were seven makes of ma-

chines represented in the party, and a friendly trade spirit ruled. The run was gotten up on short notice and everyone was gratified with the showing made. It is planned to have an outing at least twice a month for the rest of the year.

The board of directors is looking for a suitable clubhouse which they expect to find within ten days. G. H. Westing has announced that he will start a \$200 subscription list among the dealers with a donation of \$25 for the furnishing of the rooms. The chances are the club rooms will be in the business district of the city.

On September 14 the club and the Indiana Racing Association is planning to hold a race meet at the Indiana State Fair grounds. The chief event will be the 100-mile race on the mile track. The men who are expected to compete in the race are E. G. Baker, Don Klark, Frank Houff, Chas. Herrman, Frank Marshall, Thurman Constable, L. S. Taylor, Noble Shepard and a number of others from neighboring states.

CLEVELAND NOTES.

IT is in the air in Cleveland that the *Pittsburg Press* is to hold another road race from Erie, Pa., to Pittsburg. Kumlner Brothers, who piloted the Reading-Standard team in the last race from Cleveland to Pittsburg are going to enter the same team again. Hard luck in the other race lost the team a place in the finish.

ALL Indian riders of Cleveland are preparing to enjoy themselves on the second Sunday of September. The secret is not out as yet, but it is hinted that "Looie" Mueller is to entertain the boys after a short run.

GEORGE KAUFMAN, of Woodland avenue, has received several of the 1913 Triumphs. George is busy giving demonstrations daily, and has disposed of several of the machines.

THE West Side Motorcycle Company, the Harley-Davidson branch of the Lister Motorcycle Company, has disposed of nearly 75 machines on the West Side this season. This is three times the number sold during the same period last year.

THE K-V Motorcycle Company, with George Knapp at the helm, has placed 17 Hendersons on the streets of Cleveland, despite the late start in the season.

NEW riders announced at the Luna Motordrome are Charles Glenn, of Toledo; W. S. Witherspoon, of Cleveland; George Flash, of Buffalo, N. Y., and Eddie Holsinger, of Canton, Ohio, all of whom will be seen in action from now on.

BERT BROCK and G. W. Drench left Cleveland recently on a two-weeks tour. New York being the destination. Brock rides an Excelsior and Drench a Flying Merkel.

THOMAS F. STONE is making a trip from Granite City, Ill., to the Pacific Coast on his motorcycle.



Branch No. 7, Edwards & Crist, 3143 Logan Boulevard, Chicago.

MANUFACTURERS

TO OPEN FOREIGN BRANCHES.

AFTER popularizing its product in every State of this country, the Goodyear Tire & Rubber Company, of Akron, Ohio, manufacturers of the famous No-Rim-Cut automobile tires and Blue Streak motorcycle tires, is making preparations to open up branches in several of the countries in Continental Europe, in England with head offices in London, and in South Africa and Australia.

On September 5, L. C. Van Bever, of Toronto, Canada, vice-president of the Canadian company of the Goodyear Tire & Rubber Company, left for England, to complete arrangements for the opening of the London branch, and to establish a complete distributing system throughout the British Isles. Mr. Van Bever, will form an English company of the American house. This will control the British interests of the company as well as those in South Africa and other British possessions. Other companies, it is understood, will be organized under the supervision of Mr. Van Bever in France and Germany, and arrangements are being made to form a company in Australia to supervise the business on that continent and in New Zealand. The plan is the beginning of a world-wide selling organization and distributing system of the Goodyear Tire & Rubber Company. For the present automobile tires and other products will be manufactured at the Canadian plant of the company and shipped to the various points abroad for distribution.

NEW MODEL ARRIVES.

THAT Frank Libbey Valiant, purveyor of general publicity for the Flying Merkel interests, knows a really important bulletin when he sees it is evidenced by the following wire, received a few days ago:

"1913 Flying Merkel out today. Specifications as follows: Single cylinder; without muffler; very noisy; runs all night without stopping; color pink; tires—never. Prettiest model Joe Merkel ever designed. Everybody enthusiastic. Weight, 10½ pounds. It is a baby girl."

SIDECARS AND TANDEM ATTACHMENTS.

PROPHY side-cars were 'on the American motorcycle market in 1908; we note in our spring number for that year an announcement of a side-car attachment for the Erie motorcycle, priced at \$38 and both side-car and tri-car attachments for the N. S. U. and F. N., the latter being then handled by the Ovington Motor Co., New York. The Manson was another model of this type. Tandem attachments were listed by the Curtiss and Excelsior firms. In later issues, that year two excellent articles on the pleasure and commercial use of side- and tri-cars were written by Earle Ovington and George Sherman.

A HANDSOME STRUCTURE.

A NEW atmosphere has been created along New York's automobile row by the completion and occupancy of the United States Rubber building at Broadway and 58th street. This structure, twenty stories high, is the tallest north of Forty-second street. It is to



serve as a permanent home for the United States Rubber Company and its subsidiary companies, of which the United States Tire Company is one. The latter organization occupies the fifteenth, sixteenth and seventeenth floors as its general offices, while the street floor is given over to the New York branch.

The exterior of the building is unusually attractive. A rather free Renaissance treatment was followed in the outside finish, with modifications to meet modern conditions. Because of the height of the building it was realized that the entire facade could not be embraced at a glance, hence a two-part design was car-

ried out. The lower part of the building is far more elaborate than the upper.

The material used in the two fronts is white Vermont marble, similar in general effect to that used in the New York public library. Each of the twenty floors contains approximately 6,300 square feet, undivided. Subdivided, each floor provides 17 offices, varying in size from 280 square feet to 630 square feet. The building is fireproof throughout and the elevator equipment consists of six fast cars.

SPECIAL MINNEAPOLIS TYPE.

MINNEAPOLIS, Minn.—One of the first of the Minneapolis tricars purchased for use in the collection of mails throughout the country has been seen on the streets of this city, undergoing a very thorough test, and has created a great deal of interest. This outfit is painted a very attractive maroon, and is equipped with a starting crank, two sets of footboards and foot brake. One set of footboards is the ordinary service set used in riding, and the other set is mounted forward so that the operator can stand up well forward on the car, take mail from the letter box and drop it into the van of the tricar without dismounting. It is understood that all future cars on this order will be painted the same maroon color, as that shade is looked upon with favor by the Postmaster General.

BACK TO THE OLD STAND

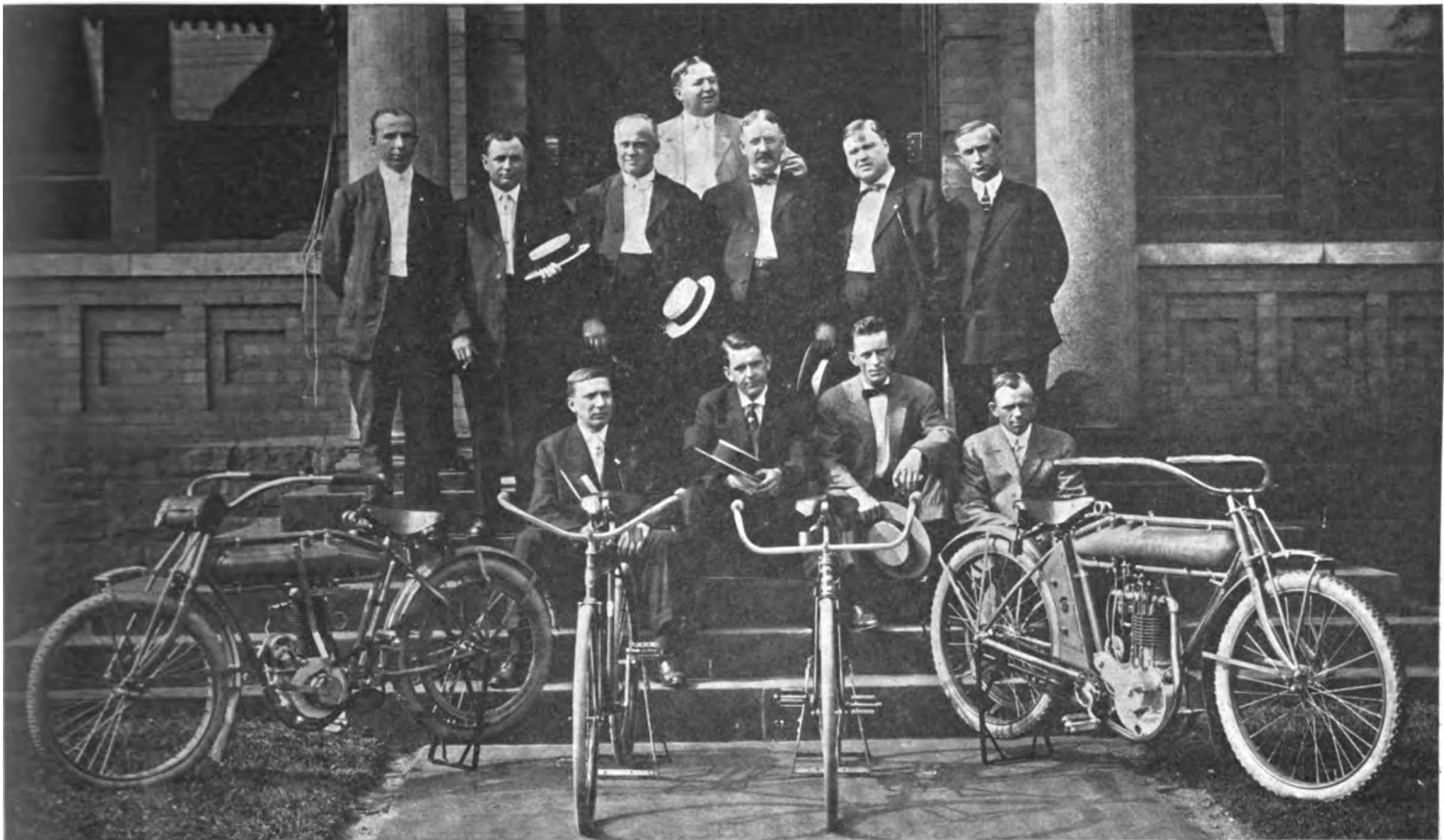
T. N. BIDDLE, generally known as "Bid" by the trade from coast to coast, has returned to the employ of the Eclipse Machine Company. Biddle was employed by the Eclipse Company from 1895 to 1909, when he left to enter the employ of the New Departure Company. The Eclipse people believe him to be the best informed coaster brake man in the trade and are glad to have him back at the old stand. Biddle started to travel for the Eclipse Company again September 1.

LEAVES MOTORCYCLE FIELD.

EDWARD F. LEINBACH, a well-known bicycle and motorcycle enthusiast, has resigned his position with the Reading Standard Co. Mr. Leinbach has been connected with the Reading Standard Co. for the past seven years and took great interest in the motorcycle trade. He first served as bill and order clerk and later was promoted to sales manager. Leinbach has accepted a position with Luria Bros. & Co., brokers, in Reading.

FOREIGN AGENCIES.

ARRANGEMENTS have been made by the Henderson Motorcycle Company, of Detroit, for the establishment of an agency in Montevideo, Uruguay, Luis Daglio being appointed representative there. An agency in London, England, is announced to have been taken by the Robertson Company.



Gathering of Pope traveling staff at the home offices in Hartford. Seated—H. M. Musselman, H. C. Lyman, T. R. Carpenter, O. Gudenschwager. Standing—Jos. Redlinger, F. L. Hamer, M. G. Littlefield, B. A. Edgar, W. B. King, Jr., D. S. Ryan. Top centre—R.

COFFMAN LEAVES CONSOLIDATED.

CONSIDERABLE surprise and no little regret have been occasioned in trade circles by the announcement that A. B. Coffman, for the last twelve years the most potent factor in the upbuilding of Yale business, has tendered his resignation as vice-president and sales manager of the Consolidated Manufacturing Company, of Toledo. Mr. Coffman gave notice at a meeting of the board of directors of the company on August 22 that he would withdraw on the expiration of his contract, which terminated August 31. He states that his plans for the future are as yet incomplete.

THE IMPROVED MOTORETTE.

AN attractive new catalog issued by the Kelsey Motor Company, of Hartford, Conn., makes the announcement that the Motorette, the sturdy three-wheeled machine which came into prominence some time ago through an endurance trip from Hartford to San Francisco, is again being manufactured. The C. W. Kelsey Manufacturing Company, original makers of the Motorette, suspended business, and the firm's affairs have now been taken over by the Kelsey Motor Company.

A VETERAN'S OPINION.

THE Wilson Brothers Company, agent for the Pierce machines in Boston, Mass., is headed by John W. Wilson, one of the first professional bicycle riders in America. When the first dependable motorcycles appeared the veteran athlete predicted that the motorcycle field would in time develop far beyond the scope of the bicycle, and he reports that Boston is doing its share to bear out his prophecy.

POPE SALESMEN MEET

Big Staff Spends Two Busy Weeks Mapping a Record Campaign for 1913.

THE force of traveling men who sell Pope bicycles and Pope motorcycles to the trade in all parts of the country recently held their annual convention at the home offices of The Pope Manufacturing Company in Hartford, Conn., and at the factory in Westfield, Mass. As a number of new men have recently been added to the sales force, the attendance was considerably larger this year than last. The Pope salesmen spent the first week at Westfield in doing practical factory work and mastering the technical details of

bicycle and motorcycle manufacturing. The second week was given over to conferences and talks on salesmanship at the company's executive headquarters in Hartford. At the conclusion of the conference the salesmen all agreed that never before had they put in such a profitable and pleasant time at an annual convention.

The salesmen's conference at Hartford during the second week were unusually lively, for with the company's volume of business increasing so rapidly, there were many things of importance to discuss. President Albert L. Pope attended many of the conferences and took an active part in the proceedings. L. D. Harden, manager of the bicycle and motorcycle sales department presided. The company's purchasing agent, J. P. Fogarty, gave a particularly instructive talk.

The last event of the second week was the annual dinner at the Hartford Golf Club, on Friday evening. President Pope presided and Col. George Pope was toastmaster. Other officers of the company, heads of departments, and correspondents also attended.

The salesmen at the convention included D. J. Ryan, New England representative; R. H. Smith, New York and New Jersey; M. G. Littlefield, Indiana and Illinois; Joseph Redlinger, Louisiana, Alabama, Mississippi and Texas; H. M. Musselman, Ohio and Michigan; Otto Gudenschwager and T. R. Carpenter, Wisconsin, Northern Michigan, Minnesota, North and South Dakota; F. L. Hamer, Virginia, North Carolina, Maryland, and Delaware; H. Lyman, Southern New Jersey, Pennsylvania, and West Virginia; W. B. King, Jr., Kentucky, Tennessee, Arkansas, and Missouri; T. B. Hallborg, South Carolina, Georgia, and Florida, and B. A. Edgar, salesman for the jobbing department.

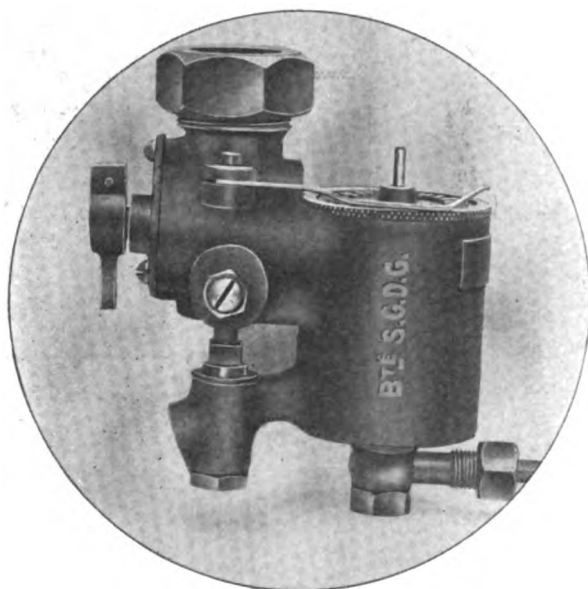


New Home of the Merkel Motor Company in Indianapolis.

THE CLAUDEL CARBURETER.

JUST what difference a change of carbureter makes in regard to speed, for example, has been demonstrated by the performances of Mike Costello on his Merkel racer at recent meets in the East. Costello's mount is of 1909 vintage and he was generally outclassed when competing with 1912 racers, but the fitting of another carbureter resulted in numerous wins, particularly on July 24, when all the Class B pro events were taken by him. The carbureter in question was a Claudel, made in France, and fitted by the American agency, Livingston, 1779 Broadway, New York City.

Most riders are familiar with a carbureter that has auxiliary air valves and primary air, the former operating by a valve and increasing the air in the mixture as the speed of the motor rises. In the Claudel carbureter, however, the necessary air for weakening the



Claudel Motorcycle Carbureter.

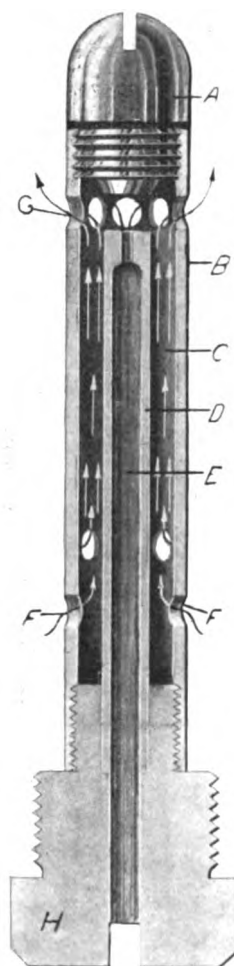
mixture as the speed increases is regulated mechanically by the movement of the throttle only, all springs and moving parts having been done away with. The primary and secondary air of the ordinary carbureter are combined in one stream which passes over the jet, and in conjunction with the characteristic Claudel jet give what are considered ideal conditions in carburetion: lean mixture at high speeds, slightly richer mixture at low speeds, and rich mixture for starting. Starting is thus easy, the motor can be run slowly when idling, will pick up quickly, and give maximum power and minimum consumption at all speeds.

The throttle is of the barrel type and is rotated by means of a lever operated from the handlebars. At opposite sides of the barrel are cut two openings, the upper being circular with a V-shaped slot in addition. The lower opening is of peculiar shape; the main portion is circular but there are also two wing-openings and a long finger-shaped extension on one side and on the other a very long V-slot, the combined forms being continuations of each other. The upper opening leads to the connection to the motor, while the lower opening surrounds the upper portion of the jet, leaving an air space all around the latter. When the throttle is closed, the jet fits in the rounded end of the finger-shaped extension opening, while only the tip of the upper V-opening gives communication with the motor. This gives a maximum suction over the jet for the small throttle opening, and the mixture is thus rich. As the throttle is opened, the wing-shaped apertures surround the jet and the circular upper opening is more exposed, thus giving less suction on the jet and more throttle. When the throttle is fully open, the

passage through the barrel is circular at both openings and the suction is reduced and air increased.

With an ordinary open jet, the result would be improper mixture at the higher speeds, but the Claudel jet construction prevents this. The jet has an opening at its upper end, but is surrounded by a sleeve having two series of openings, one at the top opposite the jet opening and the other near the bottom. The jet is thus enclosed in a column of air which controls by its velocity the flow of the gasoline. The velocity of this air column depends on the inrushing air in the carbureter, producing a depression at the upper openings and causing air to enter the lower series, flow upward inside the sleeve and out at the upper series. At moderate speeds, the velocities of the outside and inside columns of air are approximately equal, but as the motor speed increases the inside column of air is prevented from increasing at the same rate as that outside, due to the friction of the openings at the top and bottom of the sleeve. A lean mixture at high speeds is thus obtained. The jet working with the throttle gives a scientifically correct amount of mixture for the motor to which it is fitted.

There are two throttle adjustments: an air-screw at the bottom of the throttle chamber for regulating the minimum opening of the throttle, and a by-pass or gas-screw permitting the motor to idle with the throttle practically "closed." These adjustments are made when the carbureter is fitted to the motor and remain fixed without regard to temperature or atmospheric conditions. The jet and its body screw into the air-passage from below and are readily removable by unscrewing



The Spray Nozzle.

a plug at the bottom of the carbureter. A filter is fitted above this plug and held up against the lower part of the jet by a spring, thus preventing jet-clogging. Another filter or strainer is fitted below the needle-valve in the float chamber, giving a second preventive against clogging by foreign matter.

Other parts of the carbureter are up to the excellent construction of the jet, throttle, etc. The float chamber has a readily-removable cover held in place by a spring lever, and the float and bascules can be taken right out together. The float is a hollow metal one and surrounds the needle-valve. Priming, when necessary, is done by lifting the projecting end of the needle-valve.

The general construction follows the highest carbureter engineering principles and the effectiveness of the instrument on motorcycles and automobiles has been demonstrated abroad for several years. Claudel carbureters figure prominently on most of the record-holders of the speed-world, and as regards economy, in numerous efficiency and fuel-consumption competitions.

HOQUIAM RUN TO TACOMA

Washington Riders Found Good Roads, But the List of Perfect Scorers Was Small.

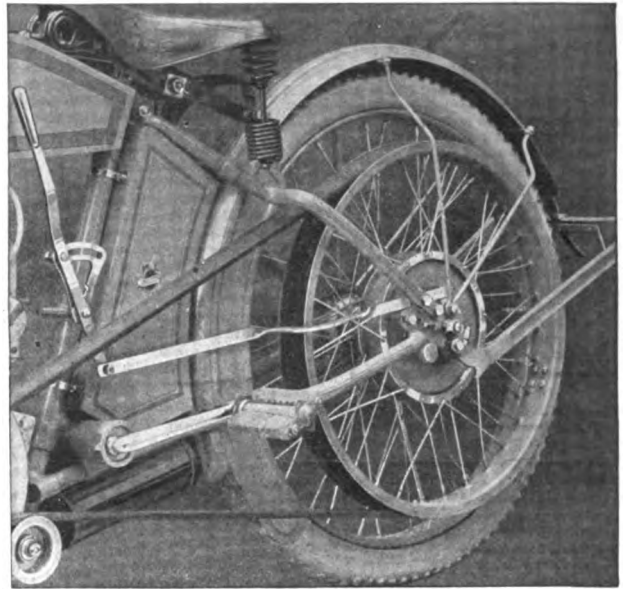
TACOMA, Wash.—A week after the run made to Hoquiam by the Tacoma Motorcycle Club, the Hoquiam club returned the compliment by making their first endurance run to Tacoma, on Sunday, August 25. The riders began to arrive in "The City of Destiny" shortly after 10 o'clock from the Gray's Harbor City and continued to check in until almost noon. A large number of members of the Tacoma club greeted them at the checking depot at Tenth and Tacoma streets, where they were checked in by Ray E. Day, an official of the Tacoma club.

Those who arrived in time were H. P. Luce, Edward French, C. J. Ritchie, Clyde Lewis, William B. Ogden, Ray Kimball, E. A. Truitt, C. B. Prentice and Henry Millafer. The riders reported ideal weather and excellent roads along the route of the run. On the return trip it was found that but five out of the 16 who started arrived in Hoquiam Sunday evening on schedule time. Only two, however, recorded perfect scores at all checking stations. They were Clyde Lewis, riding a Merkel and Edward French, a 17-year-old rider, on an Indian twin. The other three on time were L. L. Luci, on a Flanders; C. J. Ritchie, on an M. M., and E. A. Truitt, on an Indian.

Two accidents occurred on the run. James M. Anderson ran into a cow on the road beyond Gate and was injured. R. M. Streater, after losing his way beyond Gate, finally returned to that place and took a new start for Olympia with only 20 minutes in which to make 18 miles. He was driving at a terrific rate and when several miles outside of Gate lost control of his machine on a sharp curve and was thrown heavily, being rendered unconscious for a few minutes. He was badly bruised and his machine was smashed.

A NEW 24-hour record has been made by an Australian motorcyclist, P. O'Brien, who rode 522 miles. Five hundred and seventeen miles was the previous record for a full day.

The Free Wheel Control



HARLEY-DAVIDSON FREE WHEEL CONTROL

ANY Harley-Davidson dealer will **PROVE** by **ACTUAL DEMONSTRATION** that the Harley-Davidson will *outpull* any other make from a standing start, on the level or on a hill, and with either one or more riders.

The Free Wheel Control is located in the rear wheel because that is the only place there is room to make the parts large enough to do the work demanded, and its location and construction insure easy starting without any chance of stalling the motor.

As no oil or grease is used on the contact surfaces there is nothing to soil the rider's clothing—**AN IMPORTANT POINT.**

The Free Wheel Control runs on ball bearings—big ones—with three inch races. The thrust bearing is a ball bearing too, with a two and three-quarter inch race—large enough to hold a 30 H. P. motor.

The contact surfaces are **BURN PROOF** and they work on hardened steel plates—there is nothing else to wear out

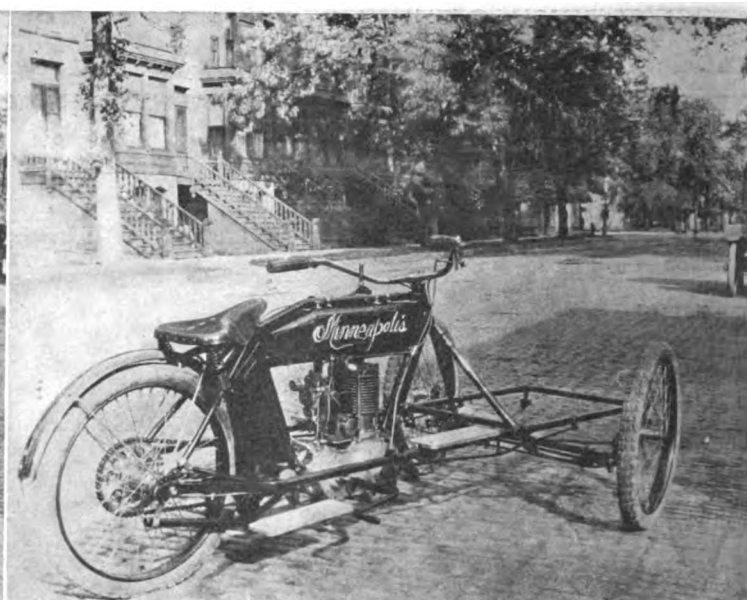
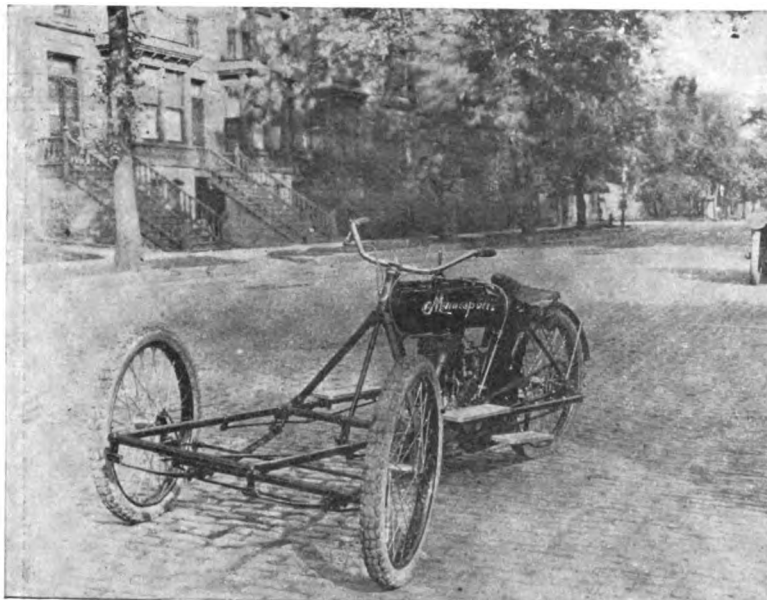
The Free Wheel Control is patented. The United States Government has allowed every claim we asked for in our application for patents, showing that the Government recognized the Free Wheel Control both as radical and important.

Now everyone **KNOWS** what the Free Wheel Control can do and **WHY.**

Harley-Davidson Motor Company

265 C Street

Milwaukee, Wisconsin



TRICARS IN POSTAL SERVICE.

IN the accompanying photographs is shown one of the first Minneapolis tricars to be placed in service for the collection of mail in Washington, D. C. The machines have attracted much attention, and it is announced that their work under severe tests has been uniformly satisfactory. The picture at the left shows the left side of the machine and displays the two sets of foot brakes; the view at the right shows the starting crank and foot brake, and the photograph below was snapped while the machine was being driven up a 30 per cent. grade in its final test by government officials.



ELEVEN RIDERS FINISHED.

SOME of the worst roads in Missouri were included in the route of the third annual reliability run of the South Side M. C., of St. Louis, which was held on Sunday, August 11. Twenty-six riders entered the contest and 11 finished. Fred Garst carried off first prize, a handsome cup; H. Johnson, in second place, was awarded a gold F. A. M. pin; T. Bahnsen received a silver medal, and each of the other finishers received a medal or a motorcycle accessory.

WANTS AMERICAN MACHINES.

W. G. HANDCOCK, of Melbourne, Australia, writes that he is desirous of representing American motorcycles for Australia and New Zealand. He has had over twenty years' experience as a manufacturers' agent and has successfully han-



CYCOMO SIDE-CAR.

THREE views of the new Cycomo side-car, manufactured by the Cuyahoga Motorcycle Company, of Cleveland, Ohio, are given in the accompanying photographs. It will be noted that the attachment is extremely simple in construction, and correspondingly light and strong. The frame is oxy-welded and interchangeable bronze fittings are used for attaching. One of the features is a patented flexible seat which has a tendency to conform to the body of the passenger. Another point is that the skeleton construction of the side-car reduces wind resistance to the minimum, and allows for extra speed.

RACES AT ELWOOD FAIR.

ELWOOD, Ind.—So popular has motorcycle racing become here that the Elwood Driving Park & Racing Association included races in the program at the local fair. There were nine machines entered in a ten-mile event. Baker, the professional rider of Indianapolis, was to have given an exhibition, but his machine, which had been shipped, failed to get in on time and the large crowd, which numbered over 5,000, was deprived of this interesting feature.



dled motorcycle and automobile lines to date. Manufacturers desiring to communicate with him should address him, c/o Messrs. J. Hewitt & Co., 2 Lime Square, London, E. C. A representative of Mr. Handcock will make a business trip to this country in the near future.

RACES, baseball game and other sports, combined to make the annual picnic of the Rochester Motorcycle Club a huge success.

The Cycomo Side-Car. Light and simple extra passenger attachment made by Cleveland Concern.

Repair shop records show that the wrist pins and connecting rod bearings are the first parts of your motor to feel the effect of improper lubrication.

Both of these parts are out of sight.

The motorcyclist cannot tell whether they are properly or improperly lubricated until the trouble comes. When it does come, the trouble is serious.

That indicates the importance of selecting the right lubricating oil in advance.

The correct oil can't be determined by simple tests. The motorcyclist must rely on authoritative guidance.

In producing Gargoyle Mobiloils, we made a detailed study of the motor construction of every American motorcycle and many foreign makes. The several grades of Gargoyle Mobiloils are made to meet the individual characteristics of each type of motor.

Our chart of recommendations (printed on the right) shows the correct grade of Gargoyle Mobiloil for each make and model of motorcycle.



In buying Gargoyle Mobiloils, you will find the grade indicated on the can directly below the Gargoyle (our mark of manufacture), and the word "Mobiloil." By buying in barrels, half-barrels, five or one-gallon cans, you can always be sure that you have the correct oil and the correct grade for your motor.

The various grades for motorcycles,

refined and filtered to remove free carbon, are named:

Gargoyle Mobiloil "A"
Gargoyle Mobiloil "B"
Gargoyle Mobiloil "Arctic"

They are handled by the higher class garages, automobile supply stores and others who supply lubricants.

This list shows the right oil for your motorcycle.

Explanation: In this schedule the letter opposite the name of motorcycle indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." Recommendations cover all types of the same make unless otherwise stated.

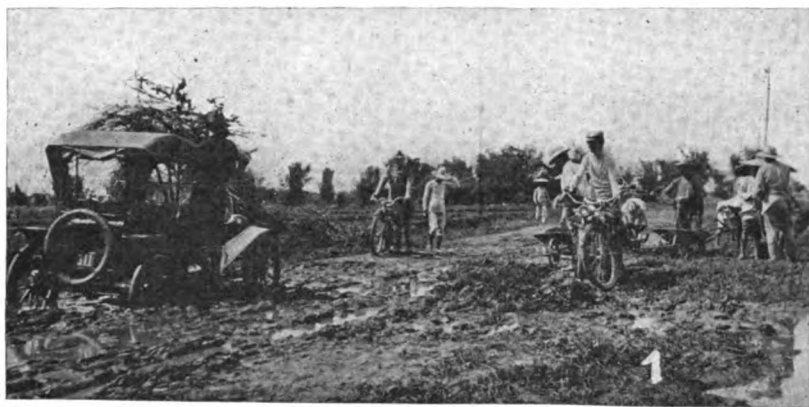
MODEL OF	1908		1909		1910		1911		1912	
MOTORCYCLE	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
American.....	B	B	B	B	B	A	B	A	B	A
Apache.....	B	B	B	B	B	A	B	A	B	A
Armac.....	B	A	B	A	B	A	B	A	B	A
Arrow.....	B	A	B	A	B	A	B	A	B	A
Augstin-Koch.....	B	A	B	A	B	A	B	A	B	A
Aurora.....	B	A	B	A	B	A	B	A	B	A
Auto-Bi.....	B	A	B	A	B	A	B	A	B	A
Black Hawk.....	B	A	B	A	B	A	B	A	B	A
Bradley.....	B	A	B	A	B	A	B	A	B	A
Breed.....	B	A	B	A	B	A	B	A	B	A
Crouch.....	B	A	B	A	B	A	B	A	B	A
Curtiss.....	B	A	B	A	B	A	B	A	B	A
C. V. S.....	B	A	B	A	B	A	B	A	B	A
De Luxe (1 cyl).....	B	A	B	A	B	A	B	A	B	A
De Luxe (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Detroit.....	B	A	B	A	B	A	B	A	B	A
Detroit Bi-Car.....	B	A	B	A	B	A	B	A	B	A
Eagle.....	B	A	B	A	B	A	B	A	B	A
Electra.....	B	A	B	A	B	A	B	A	B	A
Emblem (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Emblem (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Erie.....	B	A	B	A	B	A	B	A	B	A
Excelsior (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Flanders.....	B	A	B	A	B	A	B	A	B	A
F. N.....	B	A	B	A	B	A	B	A	B	A
Geer.....	B	A	B	A	B	A	B	A	B	A
Gerhart.....	B	A	B	A	B	A	B	A	B	A
Greyhound.....	B	A	B	A	B	A	B	A	B	A
Harley-Davidson.....	B	A	B	A	B	A	B	A	B	A
Haverford.....	B	A	B	A	B	A	B	A	B	A
Hilaman.....	B	A	B	A	B	A	B	A	B	A
Henderson.....	B	A	B	A	B	A	B	A	B	A
Indian (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Indian (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Iver Johnson.....	B	A	B	A	B	A	B	A	B	A
Kokomo.....	B	A	B	A	B	A	B	A	B	A
Majestic.....	B	A	B	A	B	A	B	A	B	A
Manson.....	B	A	B	A	B	A	B	A	B	A
Marvel.....	B	A	B	A	B	A	B	A	B	A
Mayo (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Mayo (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Merkel.....	B	A	B	A	B	A	B	A	B	A
Minerva.....	B	A	B	A	B	A	B	A	B	A
Minneapolis.....	B	A	B	A	B	A	B	A	B	A
M. M.....	B	A	B	A	B	A	B	A	B	A
Monarch.....	B	A	B	A	B	A	B	A	B	A
Motorette.....	B	A	B	A	B	A	B	A	B	A
New Era.....	B	A	B	A	B	A	B	A	B	A
N. S. U. (1 cyl).....	B	A	B	A	B	A	B	A	B	A
N. S. U. (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Peerless.....	B	A	B	A	B	A	B	A	B	A
P. E. M.....	B	A	B	A	B	A	B	A	B	A
Peugeot.....	B	A	B	A	B	A	B	A	B	A
Pierce (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Pierce (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Poppe.....	B	A	B	A	B	A	B	A	B	A
Racyle.....	B	A	B	A	B	A	B	A	B	A
Reading Standard.....	B	A	B	A	B	A	B	A	B	A
Reliance.....	B	A	B	A	B	A	B	A	B	A
Royal.....	B	A	B	A	B	A	B	A	B	A
Schickel.....	B	A	B	A	B	A	B	A	B	A
Scott.....	B	A	B	A	B	A	B	A	B	A
Thim.....	B	A	B	A	B	A	B	A	B	A
Thor (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Thor (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Torpedo.....	B	A	B	A	B	A	B	A	B	A
Triumph.....	B	A	B	A	B	A	B	A	B	A
Wagner.....	B	A	B	A	B	A	B	A	B	A
Yale (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Yale (2 cyl).....	B	A	B	A	B	A	B	A	B	A

VACUUM OIL COMPANY, Rochester, N. Y.

General Sales Offices, 29 Broadway, New York City

DISTRIBUTING WAREHOUSES IN THE PRINCIPAL CITIES OF THE WORLD

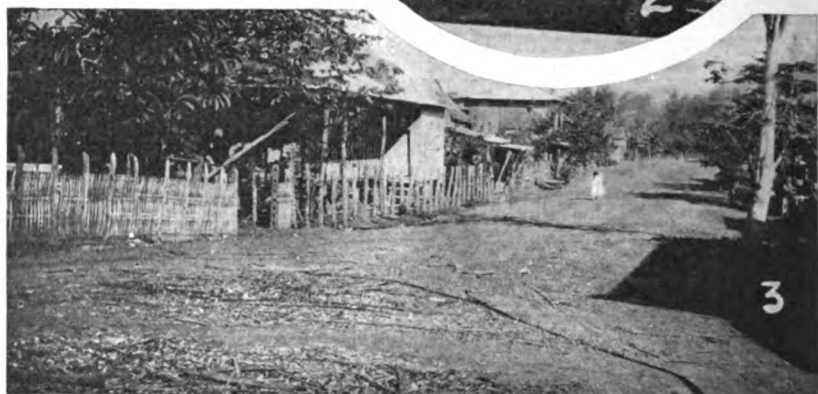
When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



IN THE PHILIPPINES.

FROM Manila, P. I., where the motor two-wheeler is making rapid gains in popularity, come the interesting photographs reproduced on this page. They are forwarded by Edward D. Gavagan, sergeant of the first class in the U. S. Army Hospital Corps at Manila. Sergeant Gavagan has been a motorcyclist for some time past and his experiences on the island roads have not been lacking in thrills. Some of the highways are described as natural boulevards, such as the one shown in picture 2, but others—by far the greater number—are of the type depicted in the first illustration. For some time after the first motorcycles appeared in Manila the natives approached them with great reluctance, but a few of the Islanders are now numbered among the riders.

Picture No. 1 shows a bad spot on the road near San Ildefonso; No. 2 is a picturesque bridge on the way to Sibul Springs; No. 3 gives a view of a street in Tiaong, Tayabas, and No. 4 shows another section of the same "thoroughfare"; No. 5 shows the baths at Sibul Springs, and No. 6 is a view in Manila—the north road, looking toward Bagio.



MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

FOR SALE.—Eclipse free engine clutch, taken off Pope machine, in A1 condition; lever control, \$7.90. Prest-O-Lite tank, complete with gauge and clamp, \$4.95. Schebler carburetor, suitable for four or six-cylinder machine, \$7.75. Or will exchange for good automobile casings, 30 x 3. A. A. Jordan, Athens, Ga.

FOR SALE.—1911 Excelsior twin, 6 h.; first-class condition; full equipment; looks like new. Price \$150. Ray Walsh, Box 376, Hastings-on-Hudson, N. Y.

FOR SALE.—Late 1911 model Excelsior, single; used about 3,000 miles; perfect running order. Cheap. J. Asendorf, 418 Jones, East, Savannah, Ga.

FOR SALE.—Indian T. T. 1912 model; run less than 250 miles; together with Stewart speedometer, horn and rubber cover, complete. Price \$250. A. H. Lewis, 145 Montague st., Brooklyn, N. Y.

FOR SALE.—1912 Thor 7 h.; brand new; never used. Will sell for best offer. Must sell account ill-health. Clyde Koogle, Myersville, Md.

BRAND NEW HARLEY with clutch and spring seat post; used about 400 miles; \$190. 1910 magneto Excelsior; good condition; \$100. Magneto Flying Merkel, about 1910 model, tandem and lamp outfit, \$90. Indian battery, \$50. Excelsior twin, \$160. A. J. Henderlong, Crown Point, Ind.

MANUFACTURERS AND DEALERS.—Two new devices needed on motorcycles; nothing like them; no impracticable freaks. Particulars on request. J. C. Peden, Harrison, Ark.

FOR SALE.—Indian 7 h.; run about 160 miles; in good condition. All extras included. E. M. Kaltsis, North East, Pa.

MOTORCYCLE TIRE BARGAINS!—A. C. C. A. prices talk! Diamond, Goodrich, G. & J. and other standard makes, guaranteed; Gridiron, Basket and Bailey Treads; 28 x 1 1/4, \$3.00; 28 x 2 1/4, \$5.70; 28 x 2, \$4.95; 28 x 2 1/2, \$6.20; 26 x 2 1/4, \$5.45; 26 x 2 1/2, \$6.20. Guaranteed. Tubes priced proportionately low. Shipped on approval. Don't buy until you receive our price list! The Automobile and Cycle Company of America, Dept. X, 1769-1787 Broadway, New York City.

FOR SALE.—1912 Flying Merkel 6, good order; Presto-O-Lite tank, lamp, horn, carrier, cyclometer and tools. Fast machine. \$200. Palmer, 233 South Second street, Duquesne, Pa.

FOR SALE.—1912 Harley-Davidson, 7 h. p., chain transmission, practically new, with speedometer. Prest-O-Lite lamp, luggage carrier, electric horn. Must sell account ill health. First \$250 cash takes it. Address S. B. Smith, 427 Cherokee street, South Bethlehem, Pa.

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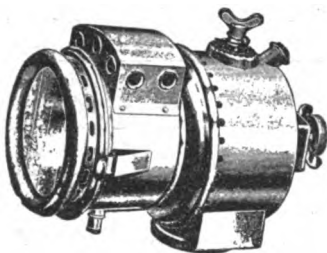
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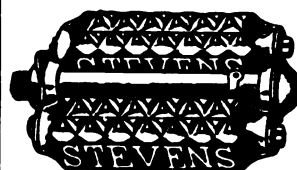
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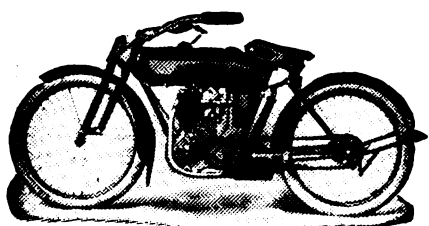
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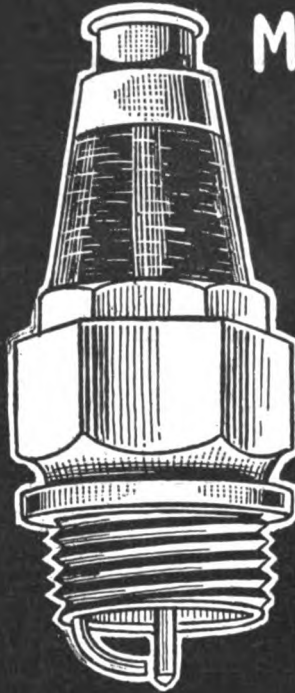
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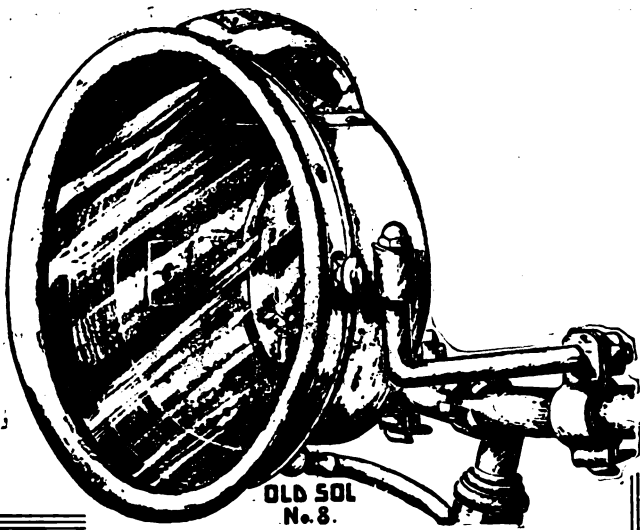
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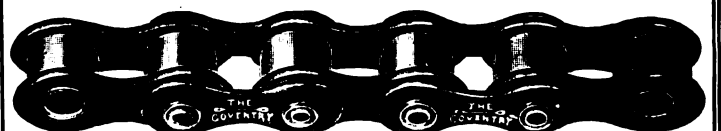
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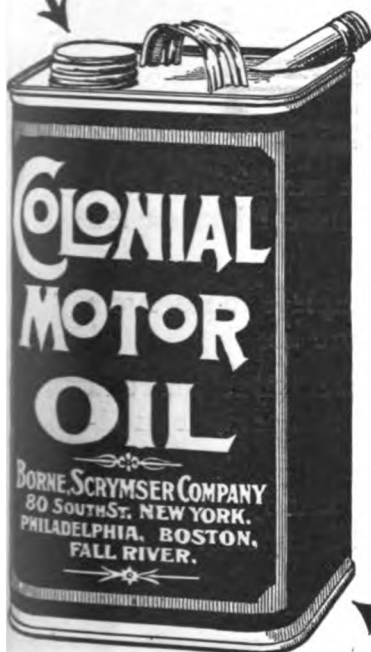
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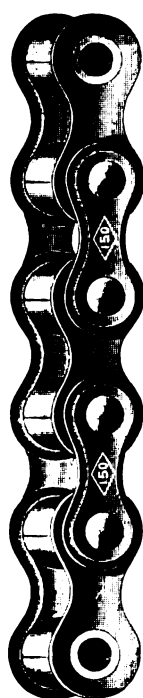
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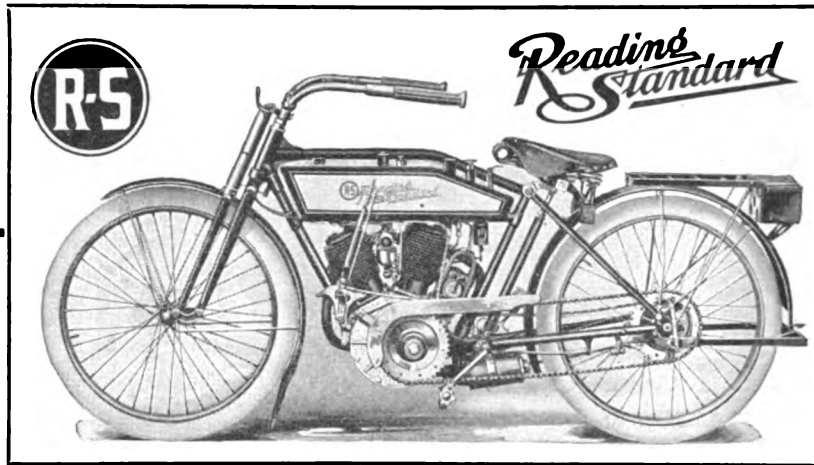
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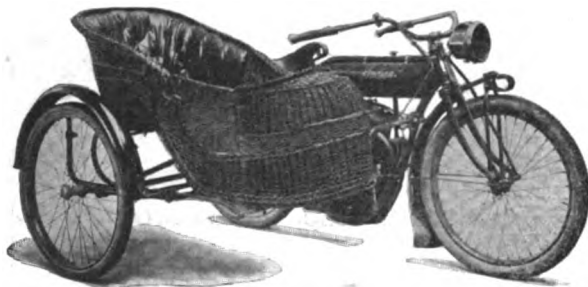
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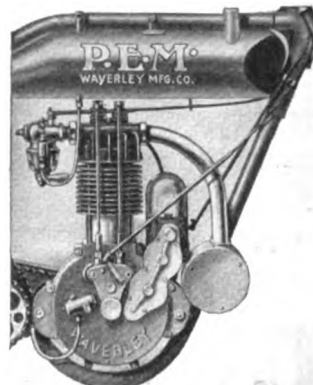
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Overhead mechanical valves—giving accurate firing with high compression.

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Positive Mechanical Oilier that never fails—The higher the speed—the more oil fed into engine.

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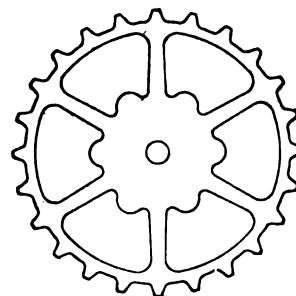
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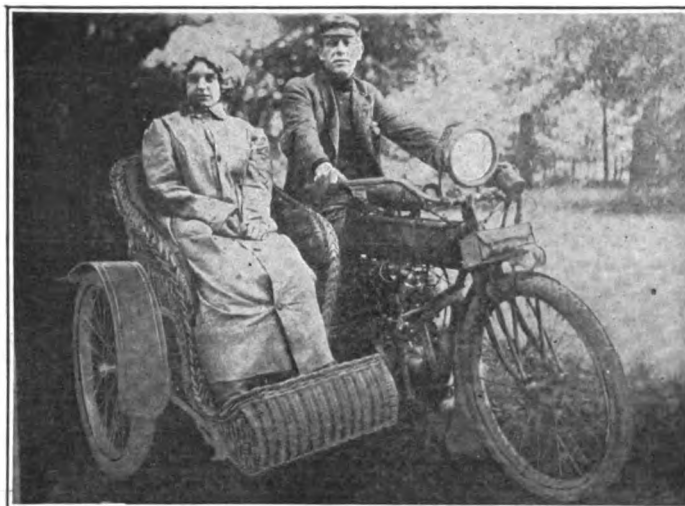
GENTLEMEN:—Your letter of June 13 is at hand and contents noted. The Side-cars are becoming very popular here and a great many will be sold. Today is Tuesday and my men are now fitting a Majestic to an Indian motorcycle, and that's the second Majestic I have sold this week. I have no more in stock now, so please hurry deliveries on orders I have on file and at the same time ship me another Red Car for Indian machine. The Side-car I used for demonstration proved very handy to me during the time I have been moving to my new location.

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Yours very truly,

B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

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DEAR SIR:—Some time ago Waking & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

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I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

If you care to, you can fix it up to suit yourself and use it for advertising. It will be all right with me.

Yours truly,

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ANYWHERE UNDER ANY CONDITION

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In knowing you can go WHEN and WHERE you please?

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In riding comfortably?

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In not having to stop for repairs?

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In owning a motorcycle that responds to your every wish?

SATI

In riding a motorcycle that is chuck full of energy?

SATI

In knowing that you have the very best motorcycle that money can buy?

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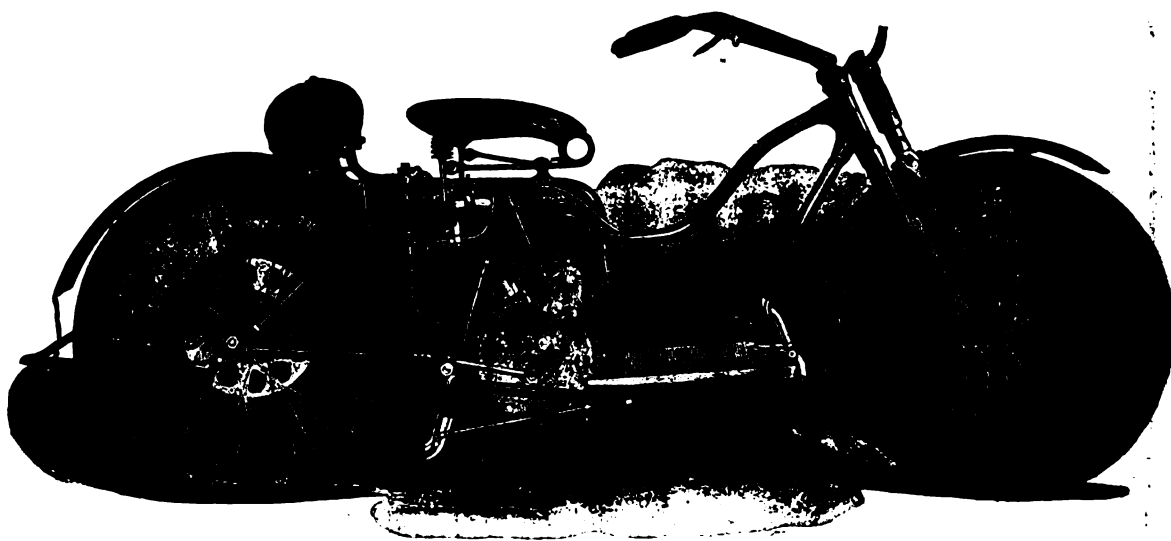
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For the man who is critical. For THE MAN WHO KNOWS.

This year's model of THE NEW ERA satisfies a long-felt want in the motorcycle world. LET US SEND YOU OUR CATALOGUE.

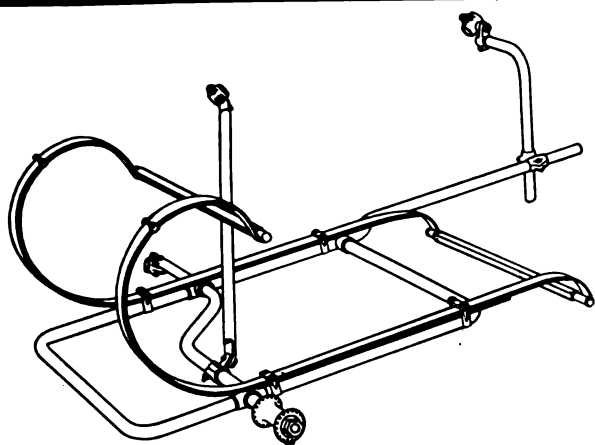
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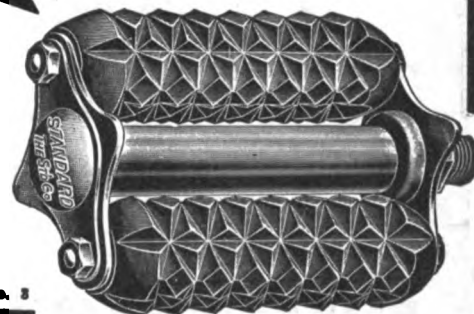
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the other to *comfort* we have
succeeded in producing
the ideal motorcycle
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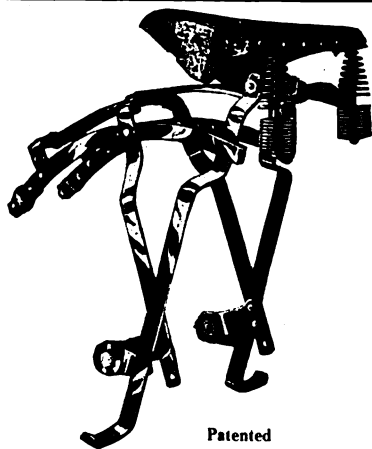
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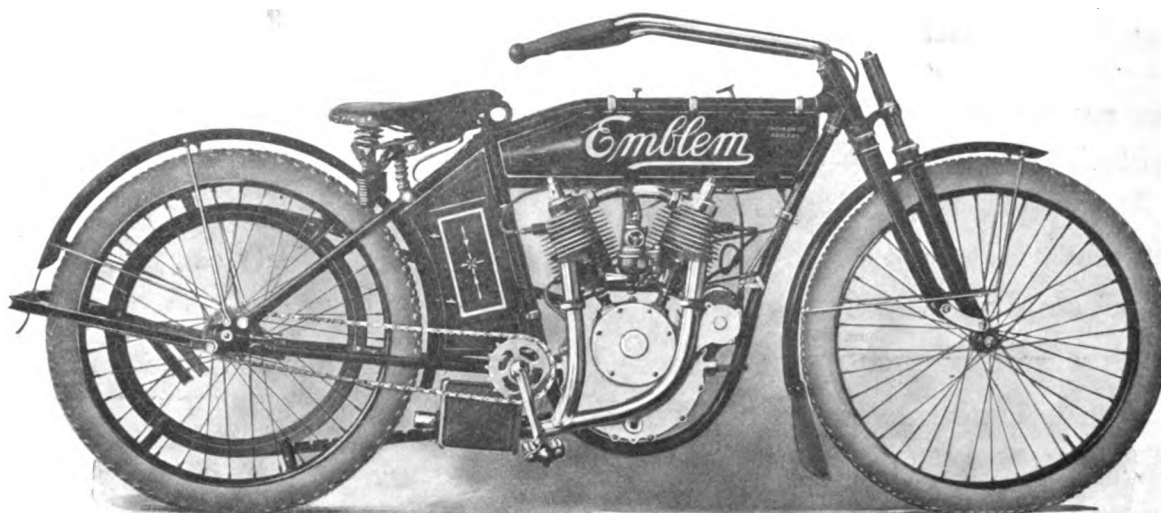
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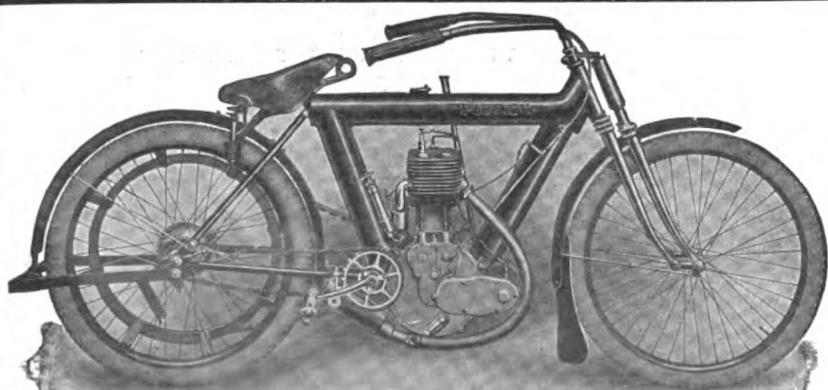
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MOTORCYCLES

MAKE BEST SHOWING—In Tacoma Endurance Run

NIGHT LETTER.

The Pierce Cycle Co., Seattle, Wash., Aug. 13, 1912.
Buffalo, N. Y.

Ed. Nelson on his 1912 Pierce Single and myself on E. A. Friend's Four Cylinder Pierce finished with perfect scores in Tacoma-Hoquiam Endurance Contest, August 11th, 1912. Distance, 204 miles. Rained most of the way and roads were in fierce condition. Fourteen machines entered, only 4 finished perfect, 2 being Pierce. Only these 2 Pierce machines entered. J. E. BUNKER.

Pierce Motorcycles during 1912 have won more endurance victories than any other make.

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FOR MOTORCYCLES

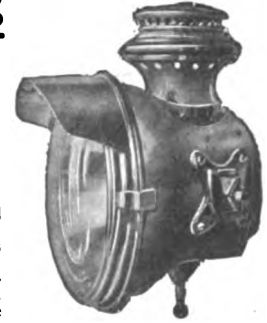
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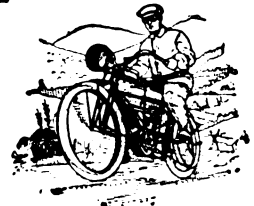
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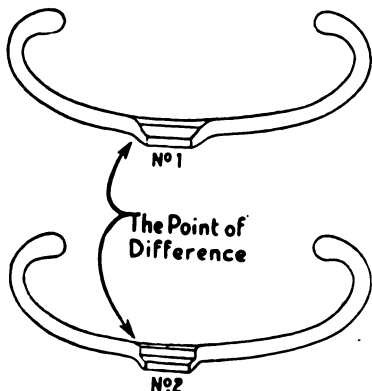
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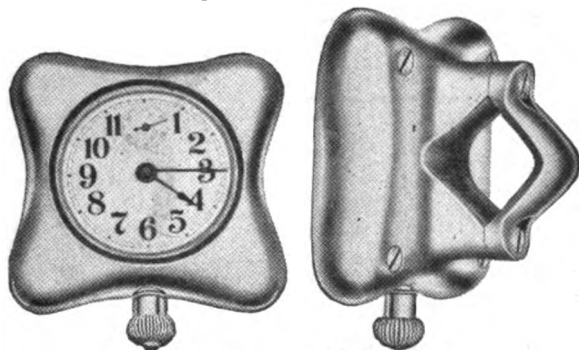
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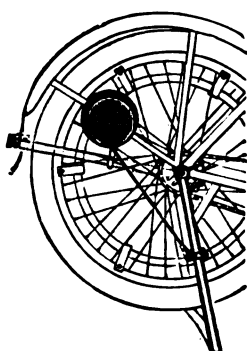
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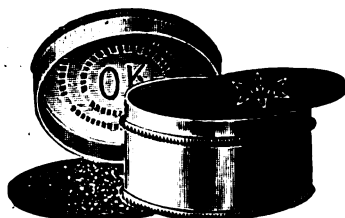


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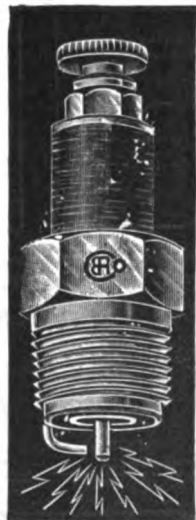
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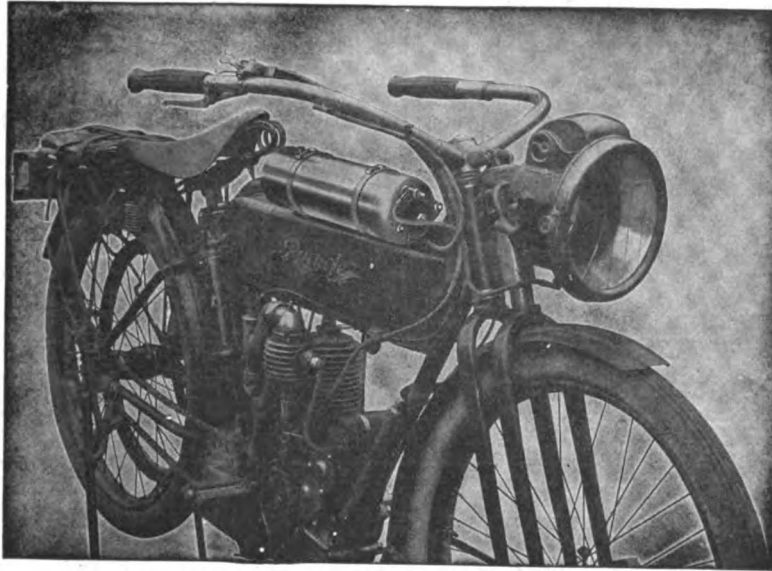
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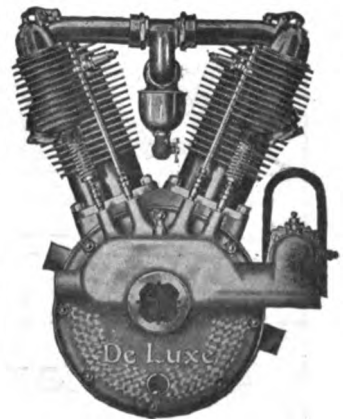
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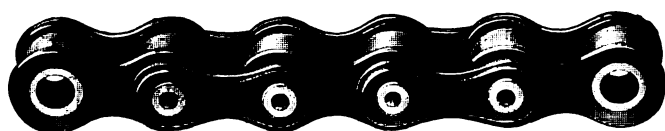
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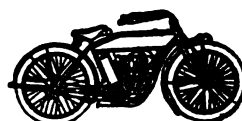
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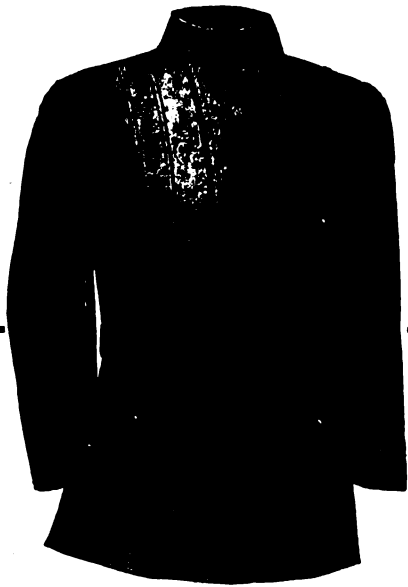
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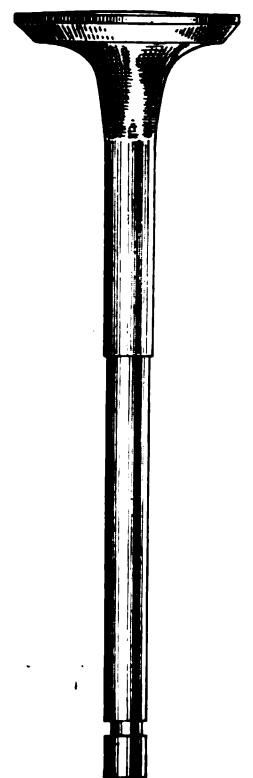
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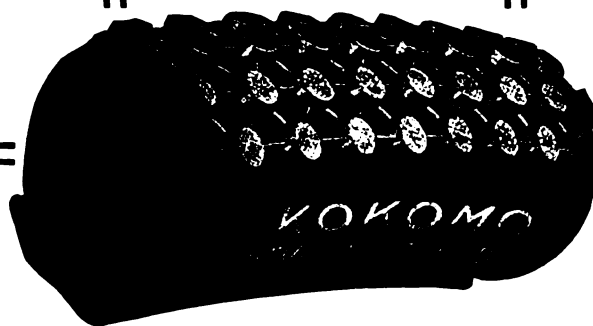
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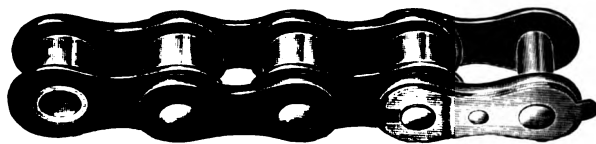
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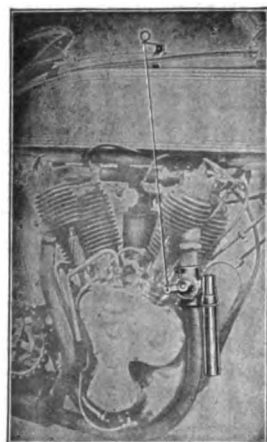
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THE CONSOLIDATED MANUFACTURING COMPANY, 1730 Fernwood Ave., Toledo, Ohio

THE "MILITAIRE" is built in *anticipation* of the logical evolution of the motorcycle. It is the result of keen study of traffic and other conditions in this country, and we unhesitatingly affirm that the "MILITAIRE" is better fitted to cope with road conditions than any other motorcycle on the market. It is radical, we admit, but so was Fulton's steamboat, and Marconi's wireless, and Westinghouse's brake.

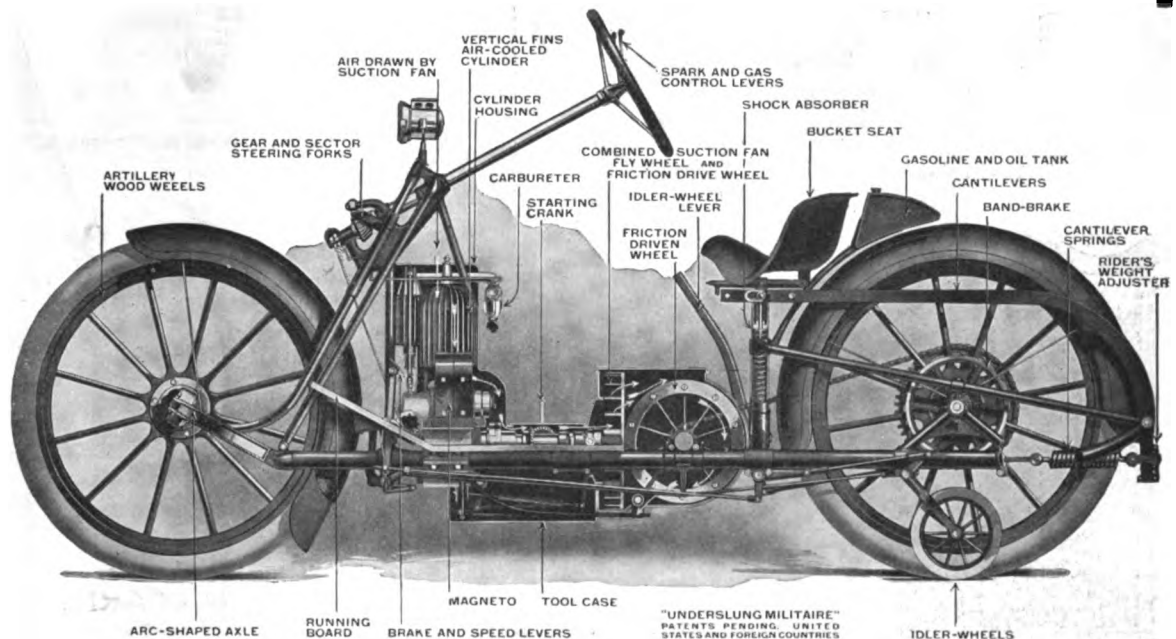
Give yourself a chance to learn more about

The "Militaire"

**THE
MILITAIRE
AUTO CO.**

(Inc.)

**CLEVELAND
OHIO**



CASH

for your motorcycle. Nothing too old, nothing too new for us to buy. We will buy one or a hundred. Box 13, Station G. New York City

IT'S GUARANTEED

1. To increase power 20%;
2. To save 20% Gasoline;
3. To Remedy Carbonization;
4. To Keep Engine Cooler.

You will never know how perfect your Motorcycle can run until you try SPEEDO. Attached in five minutes on intake manifold. Your money is refunded if you are not pleased.

PRICE, \$2.00, Including Decarbonizer

See Your Dealer or Write

FULTON-McCUTCHAN COMPANY, Distributors, 1149 Michigan Ave., Chicago

The New "N. A." BREEZE

Delivers a larger volume of properly mixed gas than any other motorcycle carbureter in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

At over 3,500 revolutions it is just as effective.

All air ports have been enlarged.

A perfect mechanical device to increase gasoline supply automatically with the opening of the throttle has been fitted.

Send for free catalog. Our Engine Trouble Text Book, 54 pages, will be mailed for 10 cents.

BREEZE CARBURETER CO., Newark, N. J.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



Motorcycle Belts are superior in tensile strength; will give greater transmission power; will last longer; are more flexible; will not slip; stretch less than other belts—in a word, they are the most economical and practical belts on the market.

SPARTAN

Belts are the almost unanimous choice of all the motorcycle manufacturers. Be sure to keep a tube of Spartan Dressing in your repair kit.

Graton & Knight Mfg. Co.

Franklin and Norfolk Streets, Worcester, Mass.

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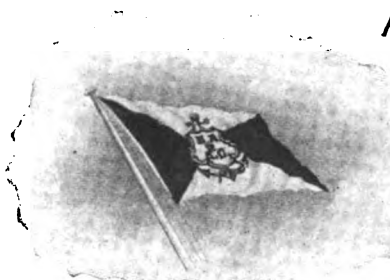
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Hamburg, den 26 Juli
1912



Hamburg-Amerika Linie

Lese - Salon

For
Universal
Satisfaction—
Use

Corbin Coaster Brakes

For
Motorcycles
and Bicycles

FOR SALE BY
THE TRADE

The Corbin Screw Corporation

(Division of the American Hardware Corporation)

NEW BRITAIN, CONN.

Western Department: 65-67 Lake Street, Chicago, Ill.

Licensed Coaster Brake Manufacturers

Mr. Wm. Diehl
% Corbin Screw Corporation
Chicago, Ill. U. S. A.

Dear Sir:-

Since leaving Urbana, Ill.
June 10th I have ridden from there
to Boston Mass, all through
England, France, Switzerland and
Germany. In this sort of a ride
it is certain that I have ridden
up and down all manner and
description of hills and mountains
but never have I found a place
where my Corbin brake was not
equal to the occasion. It
is always positive and absolutely
certain. It is all that anyone
could desire by way of an
efficient braking device.

Sincerely yours
John E. Hogge.

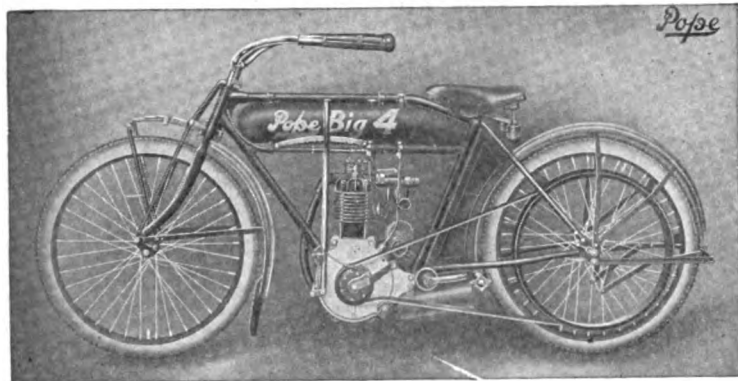
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POPE "BIG 4" A New Standard of Single Cylinder Efficiency

\$200

With Magneto Equipment, Free Engine Clutch, Idler, and Many Exclusive and Desirable Features.

Motor with valves in the cylinder head, interchangeable and mechanically operated.
Offset Cylinder, eliminating dead center and giving maximum power at slow speed.



Clutch and Idler worked by one lever.

Overhead Valves and Increased Power

In the POPE "BIG 4" are found several features of marked originality, chief among which is the novel practice of locating the intake and exhaust valves in the center of the cylinder head. Long experience in building powerful gasoline engines for Pope-Hartford automobiles convinced us that a properly designed motorcycle engine with overhead valves would develop considerably more power than any other motor of its size.

The POPE "BIG 4" conclusively proves the desirability of an engine so constructed. It sets a new standard for single cylinder efficiency and power.

Model H

is the

LEADING

HIGH GRADE

LIGHTWEIGHT

MACHINE OF

MODERATE SIZE,

POWER, AND PRICE.

DEALERS! THE POPE LINE OFFERS BIG OPPORTUNITIES IN OPEN TERRITORY!

If there is no Pope Dealer in your town, write us today for our special proposition. Catalogs on request. Watch out for Pope "Twin" Announcement.



THE POPE MANUFACTURING COMPANY, HARTFORD CONN.

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When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Cylinder and Head separately cast, preventing carbon deposits and facilitating cleaning.



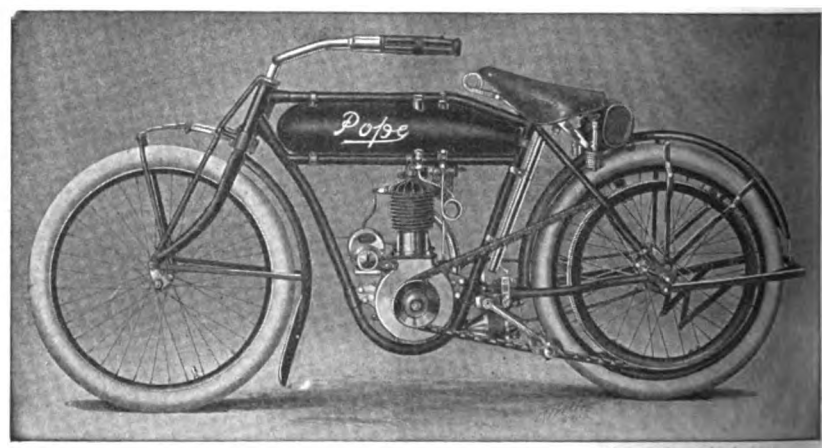
POPE

MODEL H

\$165 With Magneto

The
**LIGHT
RELIABLE**

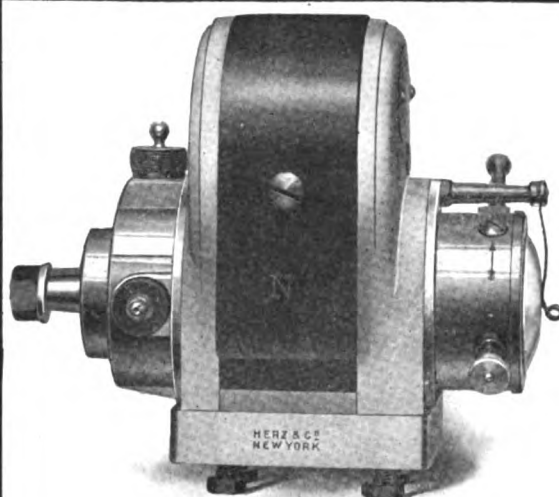
ECONOMICAL



For a Fat, Hot Spark-

a spark that you can count on even at very low speed - the kind of spark that spells the finish of jumpy, irregular ignition - equip your machine with

HERZ MAGNETO



It gives a great big flash at every turn - every turn, not just once in a while. It's a "nothing but business" Magneto - a hard, steady worker with no funny tricks.

HERZ MAGNETO is small and light. It is not affected by atmospheric conditions and is protected absolutely against dust and moisture.

For easy starting with retarded spark, no other Magneto can compare with it.

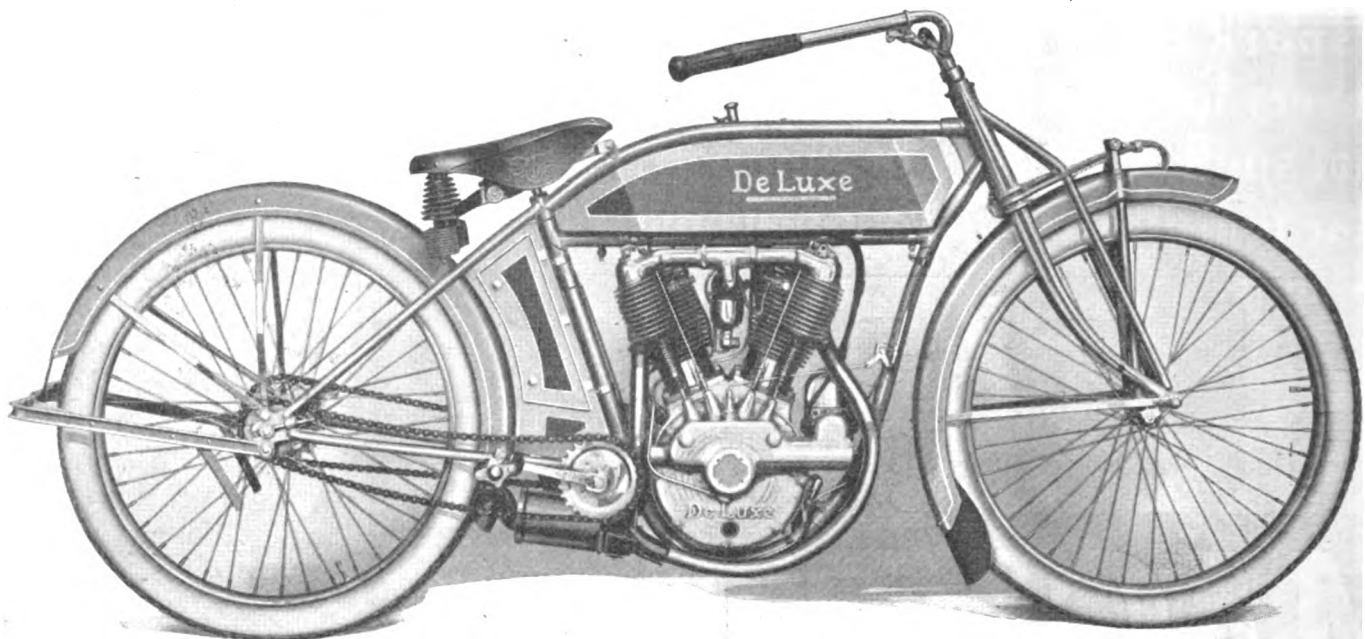
Use Herz Plugs with Herz Magneto.
The combination is the ideal ignition system.

HERZ & CO.
295 Lafayette St., New York.

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THE 1913 DE LUXE

THE CROWNING ACHIEVEMENT
IN MOTORCYCLE PERFECTION



7 H.P. De Luxe Twin, \$275

9 H.P. De Luxe Twin, \$285

To the critical and discriminating buyer who, regardless of the tendency toward "cut prices" and cheaper machines, wants "something better" we offer the 1913 De Luxe.

It is the tired man that enjoys a rest, and it is to the dealer worn out from delayed deliveries, faulty material and slighted workmanship that we are most anxious to SHOW the De Luxe.

The successful dealer requires a machine that sells readily and stays sold.

The tangible and dominant superiority of the De Luxe makes ready sales and the reliability, comfort and service makes every buyer a booster.

The features that make the De Luxe predominant as the "better motorcycle" are of real practical value and fully appreciated by the experienced motorcyclist and dealer.

We want to send our 1913 advance circular to every live dealer and motorcycle rider. Write for it today. A postal card will get it.

We are now closing contracts and allotting territory for 1913 and can make deliveries in any desired quantities.

Correspondence with dealers solicited.

Makers of the Original Excelsior Bicycles

EXCELSIOR CYCLE CO. 166-168 North Sangamon St. **Chicago, Ill.**

Distributor for California—EDWIN F. MERRY, San Francisco and Los Angeles

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INCREASE POWER

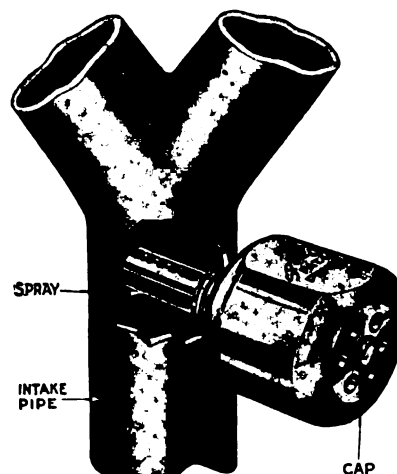
Motorcycle

NOW READY

Speedo

IT'S GUARANTEED

A
Wonderful
Mechanism



Fits Every Motorcycle

ABSOLUTELY GUARANTEED:

1. To increase power 20%
2. To save 20% Gasoline
3. To Remedy Carbonization
4. To Keep Engine Cooler

YOU will never know how perfectly your Motorcycle can run until you try SPEEDO. It is as essential as the carburetor. Thousands already in use. Attached in five minutes on intake manifold. Breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. Automatically gives just the proper additional air your running speeds require. Passes you by the other fellow. Pulls you through sand and mud. Sails you over the hills. Small enough to be out of the way. Big enough to work wonders.



Your money is refunded if you are not pleased.
No dealer is authorized to sell otherwise.

Price \$2.00 Including Decarbonizer

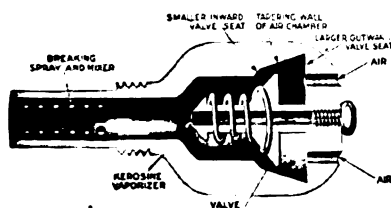
REMIND YOURSELF TO ORDER TODAY

See Your Dealer or Write

FULTON-McCUTCHAN CO.

DISTRIBUTORS

1143 Michigan Avenue
CHICAGO



"It's the SPRAY that does it"

TEAR THIS OUT

If my Dealer hasn't Motorcycle SPEEDO, I will order one direct. I will state whether for single or twin. Amount, \$2.00 prepaid. Refunded if I am not pleased.
Fulton - McCutchan Co.
1143 Michigan Ave.
Chicago, Ill.

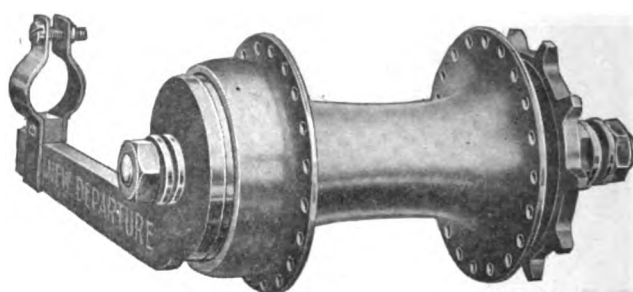
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NEW DEPARTURE

Motorcycle Specialties

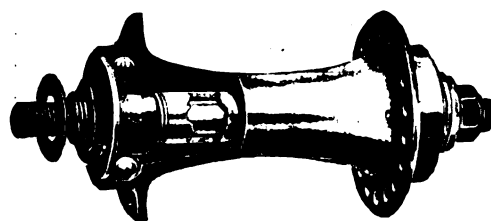
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and giving maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen $\frac{1}{4}$ -inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

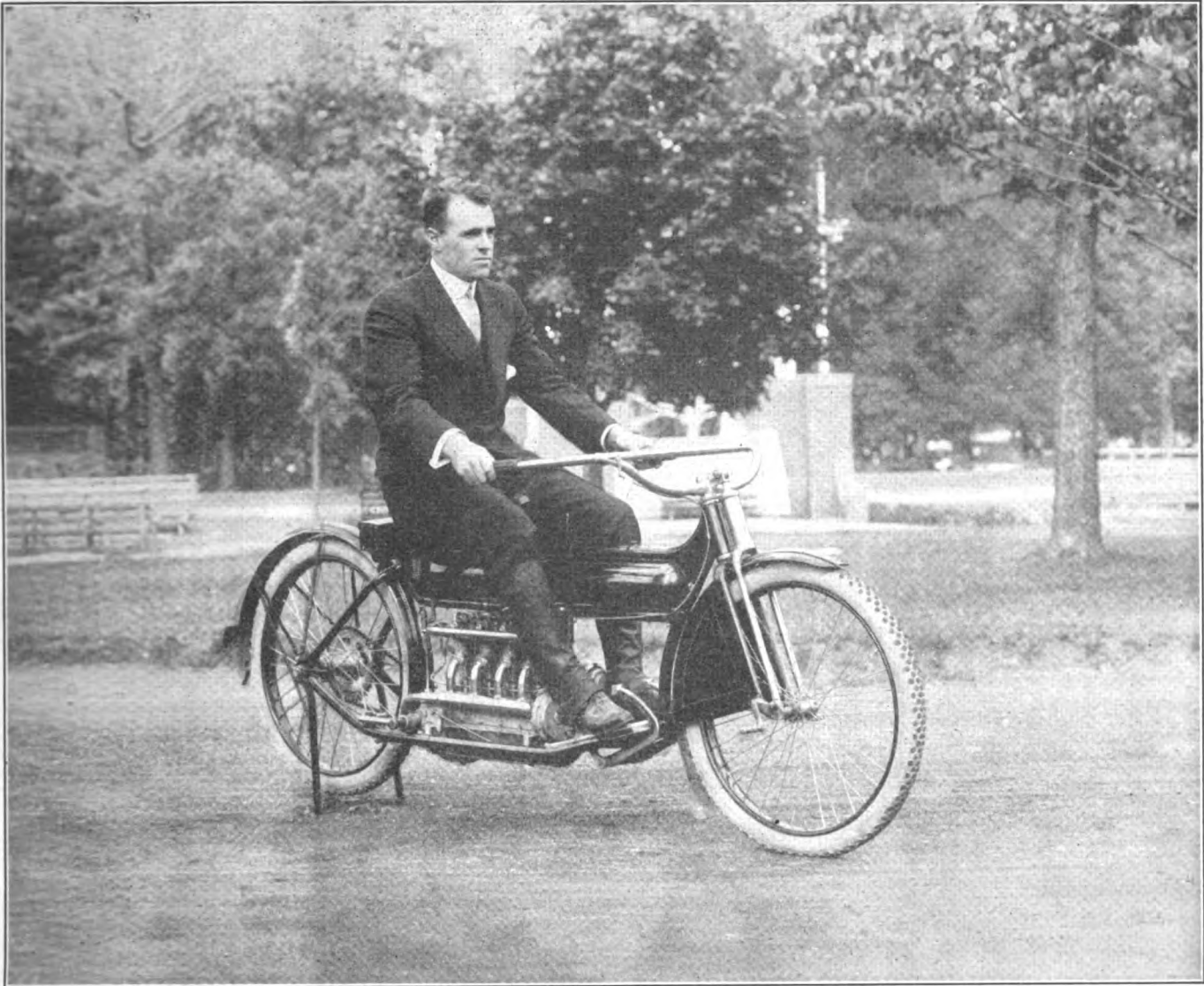
New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



Write Today for Literature

THE NEW DEPARTURE MFG. CO., Bristol, Conn.

COASTER BRAKE LICENSORS



The silent, vibrationless, 4 cylinder, 7 H. P. Henderson—\$325

HENDERSON MOTOR CYCLE

In the Henderson, the rider gets real comfort, silence, plenty of power that is truly flexible, an engine that starts with a crank and runs free.

In the average machine he gets none of these—but a machine that is very little more than a motor-driven bicycle.

So it is just the question of choosing between the two—a machine you'd really enjoy, or one that produces principally noise and discomfort.

Once you see the Henderson and feel it under you, even that question will be swept away.

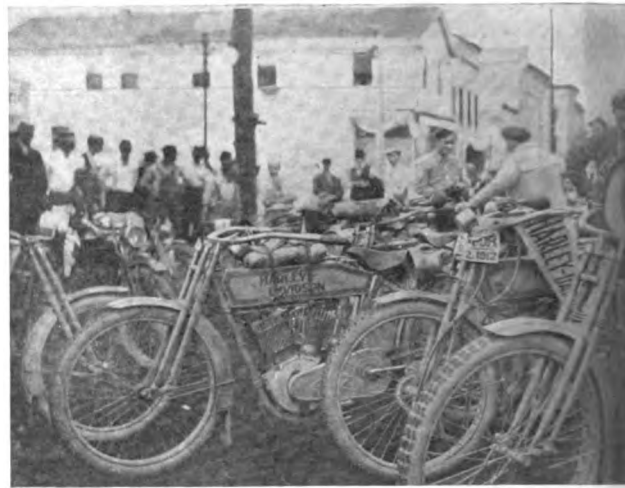
Look up the dealer.

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Ave., Detroit, Mich.

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Road washed out completely by cloudburst at Van Dyne. Notice the torrent of water crossing the road. One rider of another make is shown in the act of throwing water on his engine and clutch to cool them off. Notice the cloud of steam from the hot motor and clutch. Many riders never got past Van Dyne and the contestants commenced shipping their machines to Milwaukee ten miles back of Van Dyne. One of the Harley-Davidson riders is shown in the background riding through the water—he never stopped his motor in the stretch of water shown—didn't even get off his machine.



Riders checking in at Fort Atkinson, the noon control the first day.

The Harley-Davidson in the

Total Entries, 106; Harley-Davidson Entries, 25;

THE Harley-Davidson machines were the sensation of the tour. The Harley-Davidson singles went where twins of other makes stalled, and the Harley-Davidson twins went up hills and through mud that seemed absolutely impassable.

The Free Wheel Control enabled the Harley-Davidson riders to go through difficult places without racing their motors to the point of overheating. Not one Free Wheel Control went out of business on the whole trip, whereas the clutches on several machines of other make were the direct cause of the riders being put out of the running.

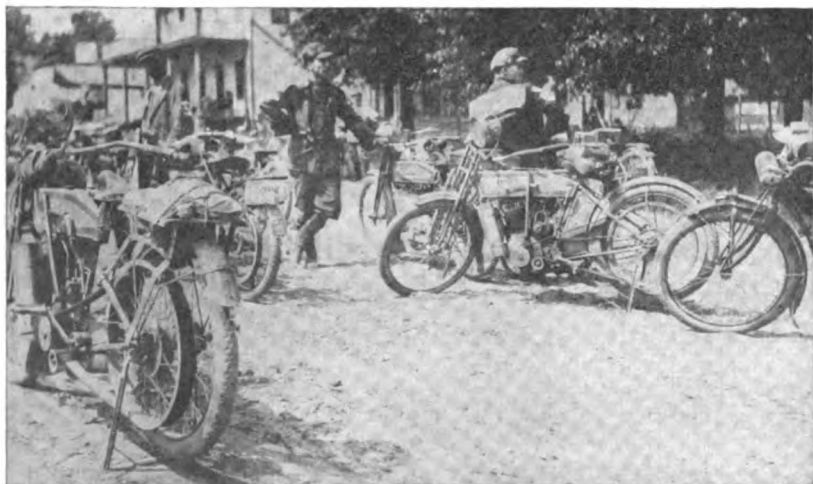
One of the perfect score Harley-Davidsons towed a competing machine of another make into Oshkosh after its clutch had gone out of commission in the mud between Ripon and Oshkosh.

A rider of still another make gave up in disgust the last day and took the train into Milwaukee when his clutch went to pieces, and still other riders were encountered time and again on the road with their clutches taken apart, almost frantic in their efforts to "dope" them up enough to enable them to finish. It is significant and noticeable that no such nursing or repairing was required by the perfect Harley-Davidsons.

Harley-Davidsons—

Second Make	-	-
Third Make	-	-
Fourth Make	-	-
Fifth Make	-	-

The remaining thirteen different makes, received



Waiting for the bunch at Brandon the second day. Four miles of heavy mud held many of the competitors back at this place.

This three-day tour was in reality the off in Wisconsin—famous for its poor roads—who takes his dealer's word for it that as the Harley-Davidson, gets just what the riders who invest in Harley-Davidson

Harley-Davidson

271 C Street

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



Willard J. Ruhle, the only rider to complete the run without a fall. Ruhle stopped for the photographer in the water as shown, but did not stop his motor and continued through this entire stretch without dismounting.



Stretch of mud five miles out of Oshkosh. Here many of the riders took to the grass at the side of the road in preference to the mud.

Wisconsin Three-Day Tour

al Perfect Scores, 17; Harley-Davidsons Perfect, 8

Entered—8 Perfect

"	4	"
"	1	"
"	0	"
"	0	"

ies, representing five
al of four Perfect Scores

No Harley-Davidsons had motor trouble, while at least one competitor was put out by a seized motor. Not a Harley-Davidson broke a chain on the whole tour, in spite of the terrific strain placed upon the transmission, proving again that large sprockets, in connection with the Free Wheel Control, make a transmission system for twin cylinder machines difficult to improve upon.

With some riders of other makes broken chains seemed to be the order and not the exception and, seemingly not enough handicapped with such troubles, one of the riders broke the crank shaft the second day and rode the balance of the run on a borrowed machine up to within three miles of the finish when his borrowed machine sheared off a driving sprocket.

At least four Harley-Davidson riders stated that they would never have completed the tour if their machines had not had Ful-Floteing Seats.

The tire car which accompanied the tourists was obliged to cut around the course at Theresa. The roads were impassable. Two miles out of Theresa the riders came across an automobile which had attempted to get through—it was abandoned, and a rear axle broken off clear, right next to the wheel, was mute evidence of the awful struggle the four-wheeler had had with the fearful roads—but the Harley-Davidson went through that mud.

Between Mayville and Iron Ridge the road was so bad in one place other riders put their machines through a barbed wire fence and rode through a field of grain. The Harley-Davidson went through that road, too.



Noon Control at Beaver Dam the second day. Out of Beaver Dam the heavy going really began.

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Motor Company
Milwaukee, Wisconsin

WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubes, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

OFFICES IN

NEW YORK

CHICAGO

DETROIT

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

THE MOST STRENUOUS TEST FOR MAN and MOTORCYCLE EVER ACCOMPLISHED



From Portland, Ore., to Portland, Me., via the Southern Route—5,964 miles—is the remarkable trip that has just been accomplished by Jos. P. Schantin, of the former city. Schantin is now on his way back to Oregon, via the Canadian Route, and at last reports had reached Milwaukee.

Not once during this arduous journey has Schantin experienced the slightest mechanical trouble of any nature whatsoever, his Flying Merkel pulling him through desert sand, over mountain ranges and through mud that would stall most engines, without a miss in its rhythmic purr. Most remarkable of all is the fact that Schantin has the use of only one leg. Therefore, his machine was put to an extraordinary racking test, as his motor had to pull the rider and baggage at all times without pedal assistance. Another rider on a different make machine started with Schantin, but for a multitude of reasons gave up the journey while crossing one of the deserts of California.

The same kind of day-in-and-day-out service is yours for the asking.

WRITE TO-DAY FOR CATALOG B.



California Distributors	The Appeal Mfg. & Jobbing Co., Los Angeles.
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Colorado & Wyoming	C. W. Brown, Denver, Colo.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

"During the past seven years I have used all makes of Tires and find Continental-Erie the best"

CONTINENTAL RUBBER WORKS, Erie, Pa.

Chicago, Ill., August 14, 1912.

Gentlemen: Just a line to let you know what I think of the Continental-Erie Motorcycle Tires. I have been riding a motorcycle for the past seven years and during that time have used all the leading makes of tires. I have never found any tire that has given me the service that the Continental-Erie Motorcycle Tires have given me. At the present time I have a pair of these equipped on my machine that I have used for over 4,000 miles, the majority of this distance having been ridden with a tandem attachment and another party on the machine over country roads.

These same tires I have also used in Race Meets and Endurance Runs and they have never given me any trouble.

Continental-Erie Tires are without question the very best tires that I have ever ridden. They having a very tough and resilient tread, make a very easy riding tire and they have always given me excellent service.

Wishing you continued success with your tire, I am, very truly yours,

B. M. BLANKENHEIM.

NON-SLIP-LAG

The new lining for pulleys. It absolutely prevents belts from tearing and slipping; increases their life and affords additional power. Non-Slip-Lag can be applied without removing Belt or Pulleys. No Screws or Metal Parts are required to hold Lag on Pulley. Non-Slip-Lag is now being used exclusively by the Eolipae Machine Co., on the Eolipae Free Engine Pulley.



CONTINENTAL RUBBER WORKS - ERIE, PA.

Another new model—

a model that is described with every truth as "the Pullman of saddles."

Such is the

BROOKS B 401

—the saddle which meets the needs of the present-day motorcyclist better than any other saddle can.

Being anatomically shaped, you sit IN it rather than ON it, and the fact that the BROOKS, the original and only genuine Compound Springs, are placed under the weight-carrying portion of the seat, and that the latter is not hinged at any fixed point at the peak, ensures that every movement of those springs will be in a true vertical direction.

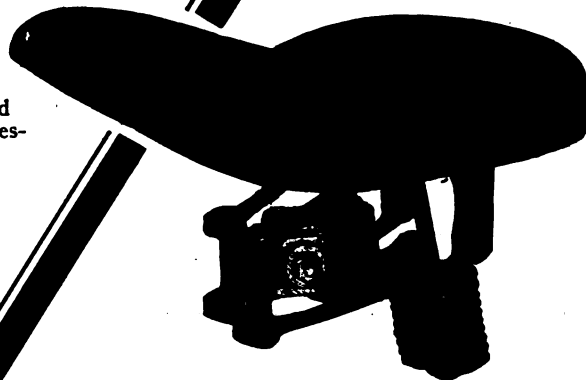
That means even greater comfort—luxury, in fact—and if that's your desire you should have it fitted to your present mount.

J. B. BROOKS & CO., Ltd.

75 Criterion Works, Birmingham, Eng.

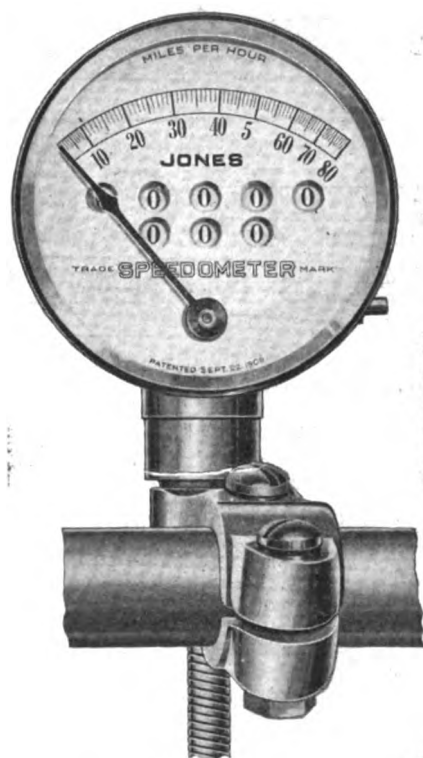
Distributing Agents for U. S. A.

The D. P. Harris Hardware Co., 48 Warren Street, New York



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JONES SPEEDOMETERS FOR MOTORCYCLES



Model 831 — \$20

Know your speed. Record your mileage. Get the real enjoyment of motorcycling by using an accurate speedometer. The JONES has no equal for accuracy. It gives excellent service, is built to withstand all vibration, constructed by skilled instrument makers, easily and quickly attached to any machine.

Used by Motorcycle Policemen

The JONES is used by the motorcycle police in all large cities. It is selected because of its accuracy and ability to withstand day-in and day-out service **every** day in the year. The JONES costs no more—and in some cases not as much—as other speedometers which lack the accuracy of the JONES.

Get Busy! Buy Your JONES Today

Write for particulars

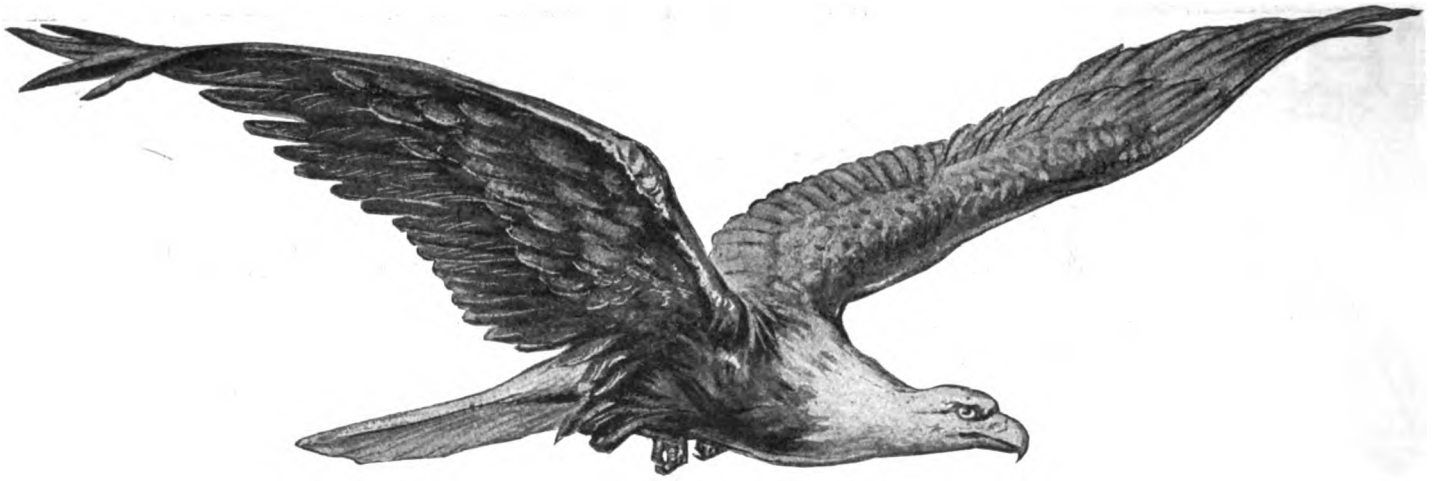
THE JONES SPEEDOMETER, Factory: New Rochelle, N. Y.

Chicago: 1430 Michigan Ave.
Boston: 109 Massachusetts Ave.
Philadelphia: 1416 Vine St.

San Francisco: 530 Golden Gate Ave.
Buffalo: 20 Goodrich St.
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ANNOUNCEMENT

1913 MODELS

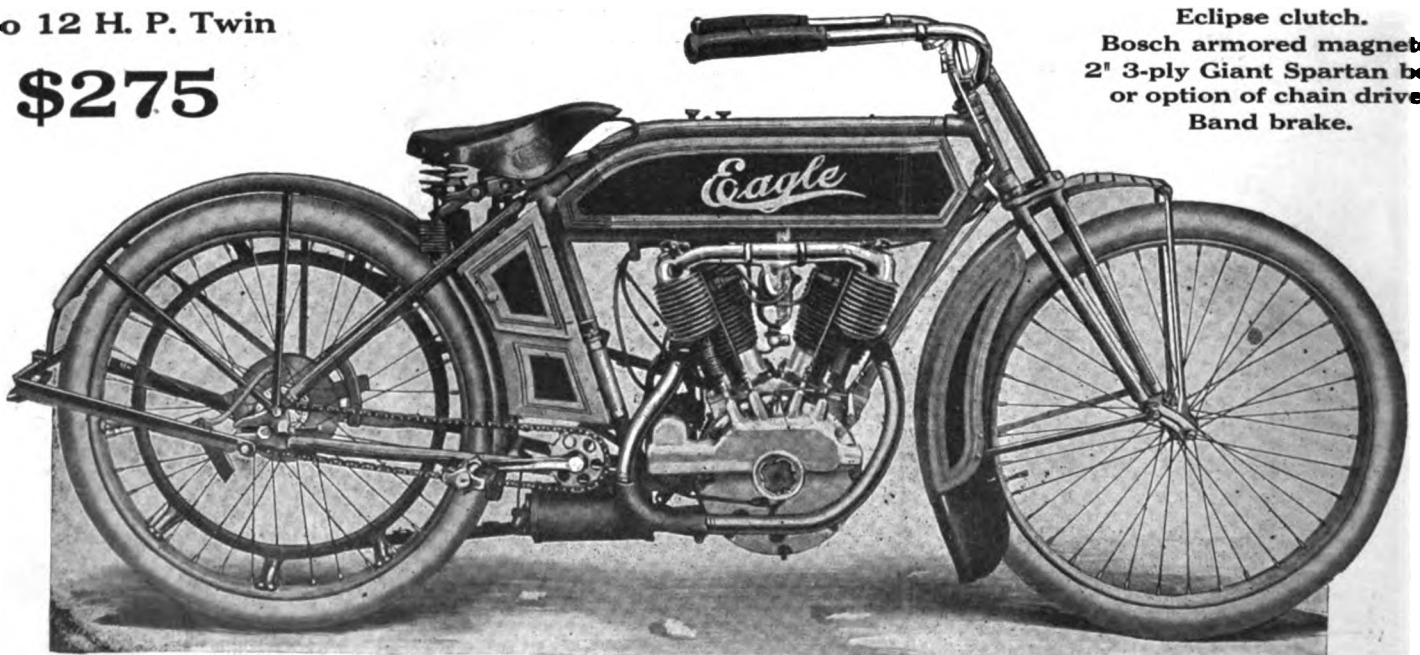
We have purchased the manufacturing and selling rights for the Eagle Motorcycle, formerly controlled by the Eagle Motor Company, of Chicago. This remarkable machine has made a **big hit** with **all** who have seen or owned one. **Every** Eagle rider is an Eagle **booster**, and we are determined to make every machine so well and use every agent and rider so white that

The *Eagle* will be

The Big Scream for 1913

9 to 12 H. P. Twin

\$275



Eclipse clutch.
Bosch armored magneto.
2" 3-ply Giant Spartan belt
or option of chain drive.
Band brake.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

THE GREAT AMERICAN



Both models are equipped with the famous De Luxe motors; Single 5 to 6 H. P., Twin 9 to 12 H. P.; the most powerful and practical motorcycle motors yet produced. All other details in proportion. A product of the best mechanical engineers in the country, with fourteen years of motorcycle manufacturing experience to draw on.

DEALERS:—You know the demand for good machines in 1912 was far in excess of the supply. The country is prosperous and the 1913 demand is bound to be twice as great. Deliveries are what count.

Apply for the Eagle proposition quickly

Now is the time to get your contract and samples. Don't delay. We have held practically all the territory open on the Eagle waiting for this announcement. It will bring in hundreds of applications from every locality. Better send in yours by night letter and get first chance.

AMERICAN MOTOR COMPANY

716 Center Street, Brockton, Mass.

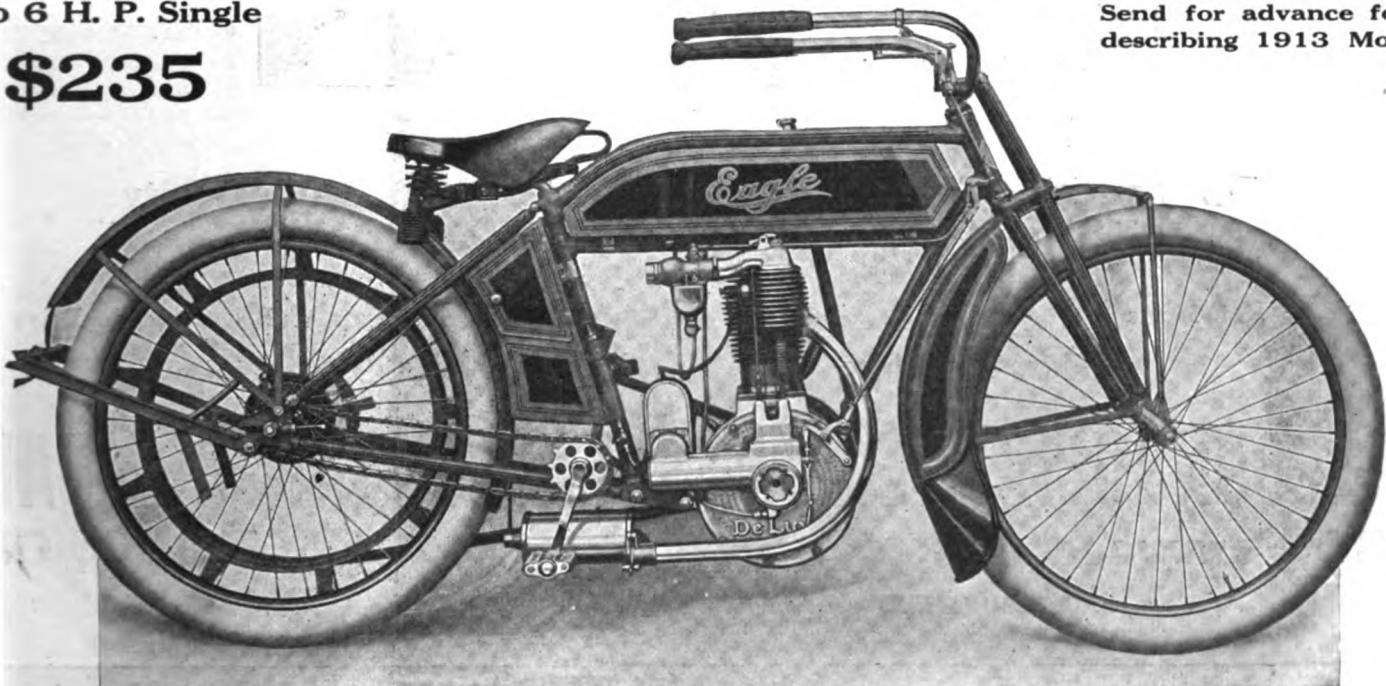
Main Distributing Stores

GEORGE P. JENKINS, 256 West 55th Street, New York
AMERICAN MOTOR COMPANY, 2724 Michigan Ave., Chicago
CALIFORNIA MOTORCYCLE CO., 818 S. Main St., Los Angeles

5 to 6 H. P. Single

\$235

Send for advance folder
describing 1913 Models.



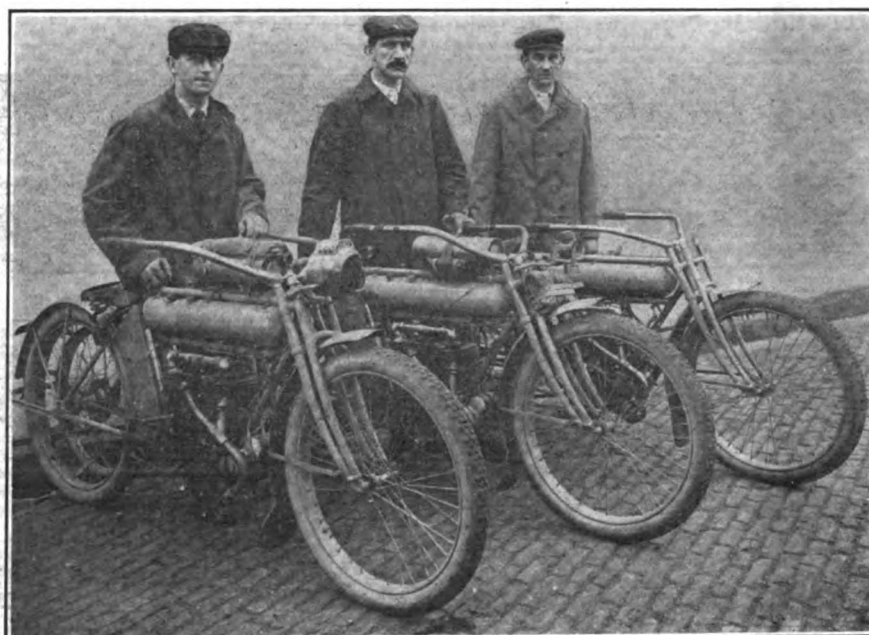
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It's A Habit With the Yale

The Yale Wins, One---Two---Three in 24 Hour New Jersey Endurance Run

The Yale team, composed of P. W. Stevens, Ortie Stevens and George Riechey, made a perfect score in the 24 hour endurance run of 325 miles through New Jersey and New York, September 15th-16th.

Through the back-breaking hills of North Jersey, through sand and mud, Yale superiority again asserted itself. Each control was reached with time to spare. Twenty-eight riders started, sixteen finished. The Yale team was again the only team with a perfect score. With one machine after another dropping out with broken frames, forks, valves, and various other ailments, the Yale team still



kept to the fore, easily overcoming every obstacle that arose in their path. Perfect lubrication, perfect transmission, perfect cooling—these partly explain why the Yale can be depended upon always to make a perfect score. But the real secret of Yale perfection is that from mudguard to steering post, every part of the Yale is constructed with the one aim in mind—**QUALITY AT ANY COST.**

Victorious Eastern Team

**Do You Need Any Further Proof of Yale Superiority
Than These Two Record Performances?**

Singles and Twins

Battery and Magneto

Belt or Chain Drive

Immediate Delivery

Catalog on Request.

THE CONSOLIDATED MANUFACTURING COMPANY
1730 Fernwood Ave. Member M. M. A. Toledo, Ohio

F. C. CORNISH, Eastern Representative, 219 Clinton Ave., Newark, N. J.

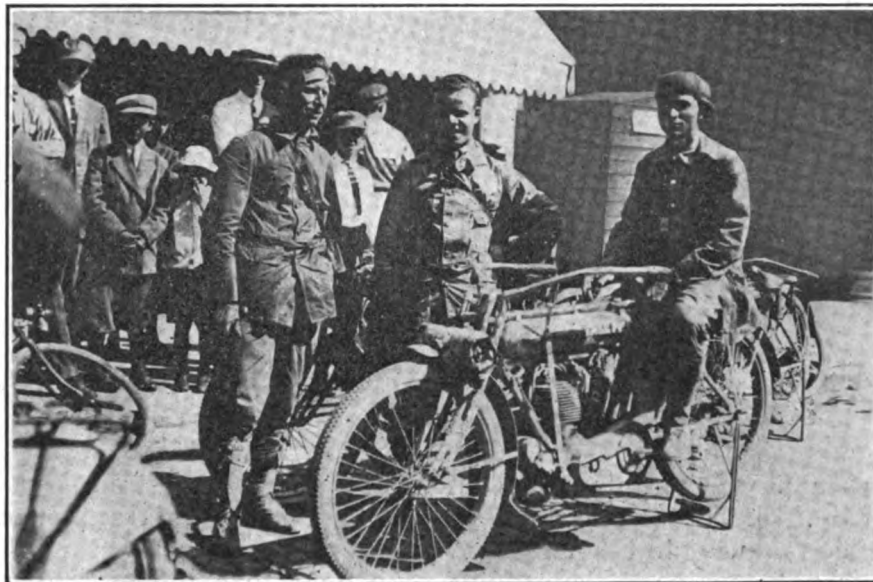
The Yale "Doos It" Again!

Sweeps Field in Tri-State 400-Mile Endurance Run

Three Yales entered and three Yales finished with perfect scores in the two-day endurance run from Middletown to Elyria and return going through Ohio, Indiana and Kentucky, August 31-Sept. 1.

The Three Yale Riders Were the Only Perfect-Score Team

While other machines were put out of commission with every trouble that can possibly overtake a motorcycle, the Yale team slid serenely along. Although the thermometer sometimes registered from 95 to 100 and above, the Yale motor with its horizontal flanges showed no sign of overheating. The Yale cool-



Campbell—Squier—Meyer

ing system is trouble proof. In the hottest weather Yale lubrication was perfect. The gear pump kept all parts perfectly oiled at all speeds, without particular attention from the rider. Get this! Three Yales entered—three perfect Yale scores—through three states, over 400 miles, and all Yales perfect.

**What More Can One Ask in the Way of Reliability,
Endurance, Service, Satisfaction?**

Singles and Twins

Battery and Magneto

Belt or Chain Drive

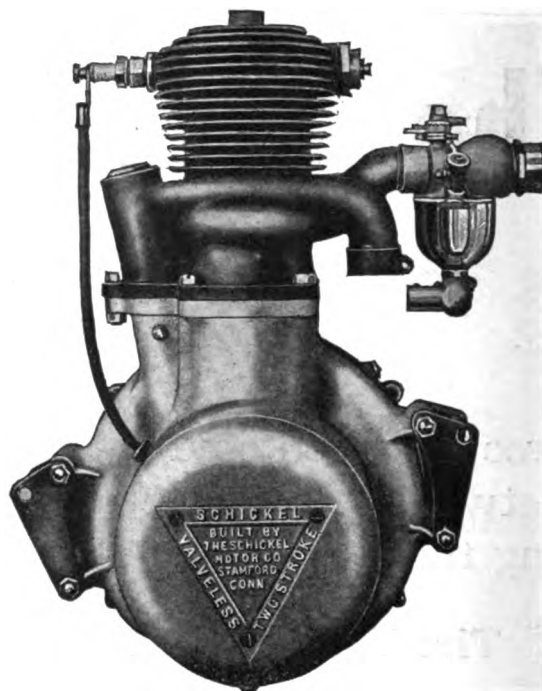
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THE CONSOLIDATED MANUFACTURING COMPANY
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**Like a Twin
But Smoother---**



The

Schickel

Valveless Two-Stroke Motor

Delivers a power impulse with each stroke of the piston.

The two-stroke motor steadies the drive,—power is transmitted to the rear wheel constantly and noiselessly.

There is not a valve to bang shut or a gear to grind out an unpleasant sound.

The absence of back lash (lost motion) between the three moving parts produces a mechanically noiseless motor.

The Schickel Motor gets down to its work without a murmur.

You don't have to fly at steep grades,—when the hill is reached, jam on power.

With bulldog tenacity the Schickel Valveless Two-Stroke Motor will hang on where others stall.

This is the motor which we install in Schickel motorcycles. For hard going, for day in and day out service you will need a Schickel.

Write to-day for Illustrative Description.

5 H. P.—\$225

We are receiving applications for our 1913 agency.

The Schickel Motor Company 59 Garden Street, Stamford, Conn.



THREE WHEELS—AND A ROMANCE.

TWO MORE

**prominent motorcycle manufacturers
have selected as equipment for next
season**

United States Motorcycle Tires

THE NEW DAYTON, recently placed on the market by the Davis Sewing Machine Company, of Dayton, O., will be equipped with United States Tires *exclusively*.

THE AURORA AUTOMATIC MACHINERY COMPANY, of Aurora, Ill., maker of the widely known Thor Motorcycle, has contracted with us to supply United States Tires as regular equipment.

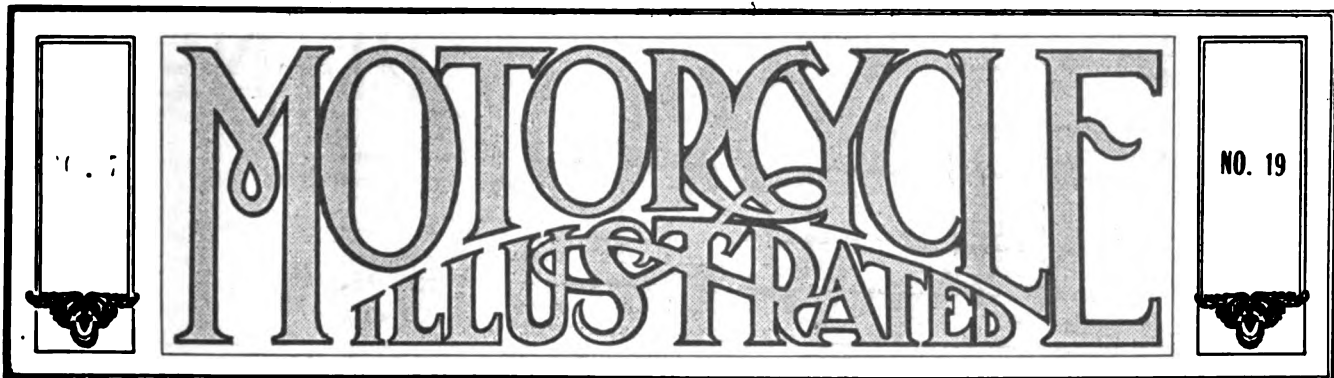
Manufacturers, as well as tire users, are learning more and more every day from *actual experience* that there is a vast difference between the character of service rendered by co-operatively made tires—such as United States Tires are—and those produced under far less advantageous conditions.

United States Motorcycle Tires combine all of the strong points of two world-famous brands of tires, each of which was recognized as a standard of quality as long ago as the pioneer days of the bicycle.

Considering first costs and last costs, character of service rendered under all sorts of road conditions and actual mileage recorded, United States Motorcycle Tires are *always* economical tires to use.

**UNITED STATES TIRE COMPANY
NEW YORK**

Dealers Everywhere



SEPTEMBER 19, 1912

THORNLEY ON THE NEWARK ACCIDENT

Competition Committee Chairman Opposes Limiting Power of Machines

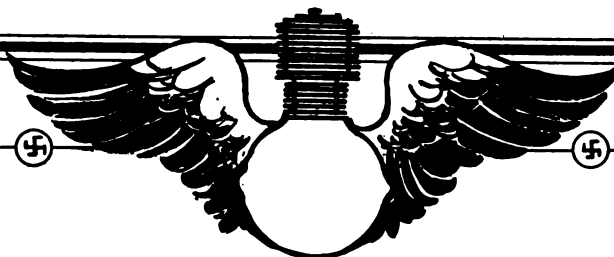
AFTER visiting the Newark Motordrome and making a careful investigation into the conditions leading up to the accident which snuffed out the lives of Hasha, Albright and six spectators, Chairman J. P. Thornley, of the F. A. M. Competition Committee, advanced the opinion that steps should be taken to bring about certain improvements in track construction, primarily with a view of affording spectators greater protection, but he was frank in stating his belief that many of the reforms suggested are far-fetched and unreasonable. When his attention was called to the argument that board-track racing should be confined to 30.50 cubic inch machines he stated unhesitatingly that such a restriction would, in his opinion, doom the racing game as far as the saucers are concerned. He also expressed the belief that under conditions similar to those which obtained at Newark a 30.50 machine, tuned to racing pitch, would be capable of doing almost as much damage as one of the big twins now in use.

Referring to track improvements which would afford spectators more adequate protection Chairman Thornley stated that action along these lines should be taken at once.

"All board tracks are in the experimental stage," said the chairman, "and we must not be too drastic in our demands for changes,

but I believe the F. A. M. Board of Directors should and will specify improvements which will reduce to the minimum the danger of a racing machine striking persons who are seated in the bleachers or grandstand. This would not be an unreasonable demand to make of the track promoters. I hope the Board of Directors will demand that sanctioned board tracks have from three to four feet of perpendicular boarding immediately above the track incline, and that above that and to the top of the railing heavy wire netting shall be used. The railing referred to should be at least six feet above the floor of the first row of seats. This would seem to be the only certain method of preventing persons in the stands from hanging out over the railing. There will probably be a difference of opinion as to how high the railing should be, and this is a matter for the Board of Directors to settle definitely.

"The Newark accident was one to inspire horror, but the conditions were so unusual that they cannot be set up as a standard by which to gauge racing on all board tracks in the future. Racers know that they are taking risks, and take them willingly, but we must use our best efforts within reason to protect those who patronize the meets. Any reasonable step in this direction will have my support."

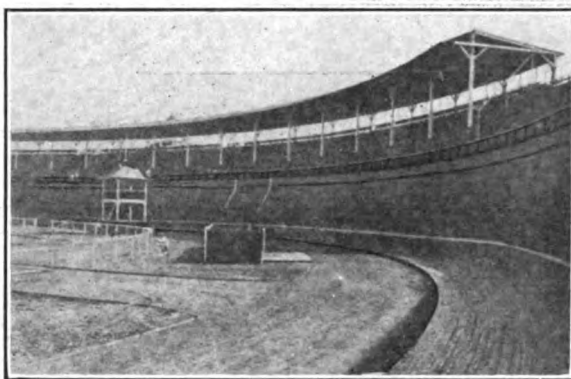


JUST WHAT HAPPENED AT NEWARK

NEWARK, N. J.—Racing men, officials and motorcyclists in general have threshed out all the details bearing on the accident at the Newark Motordrome on Sunday, September 8, which resulted fatally for Eddie Hasha, Johnnie Albright and six spectators, and it is the consensus of opinion that the little Texan fainted on his machine before it headed up the decline for its terrifying dash along the upper fence. Whether Hasha's weakness passed in time for him to realize his awful position before he suffered the crash which ended his life will never be known, but many eye-witnesses, physicians among them, lean to the belief that the rider was unconscious from the instant that his machine made its first wild swerve up the incline. Several racing men who were well acquainted with Hasha have suggested that he was temporarily stricken blind. Some time ago while attending a moving picture show Eddie alarmed his companion by exclaiming that he was unable to see. He recovered in a few moments on this occasion. In this connection it should be noted that the autopsy performed on the day following the accident showed Hasha's heart, brain and eyes to have been normal.

The accident came in the 4-mile free-for-all handicap, which was the last race, and incidentally race No. 13. Ray Seymour and Hasha started on scratch; Ray Peck and Johnnie Albright had a quarter of a lap, and Frank King and Johnnie King were each allowed half a lap. Hasha was leading at the gun with Seymour in his pace, followed by Peck, Albright, Frank King and Johnnie King, in the order named. On the third lap Hasha's machine developed a miss, which gave Seymour an opportunity to pass him. Dropping one hand Eddie adjusted something on his machine and at once he picked up speed and closed part of the gap which had been opened by Seymour. The next instant Hasha shot up the track at a sharp angle and struck the rail, above the "dead line." He rode this 2-inch railing for about 100 feet, crushed out the lives of four boys who had been watching him with their heads far out over the rail, and injured about ten others. His machine continued in this position until it struck a large post which threw the rider into the grandstand.

After striking the post Hasha's machine tore along the railing for a few more feet and then dropped down on the track directly in the path of Johnnie Albright, who was striving to get into the pace set by Peck. The wrecked machine struck Albright on the shoulder and the Denver rider went down with terrific force. Then, mixed up with the two machines, he slid along the track for about



The Scene of the Newark Tragedy.

240 feet. He was unconscious when picked up and it was quickly learned that he had sustained a fracture of the skull, a fractured leg, a dislocated shoulder and other injuries. Albright did not regain consciousness and died in a hospital five hours later. Peck was unhurt, as he passed Hasha's machine while it was still tearing along the upper railing. His escape, however, was a narrow one. Frank King and Johnnie King also managed to ride clear.

Widely varying stories, some of them quite fantastic, were told to account for Albright's fall, but the outline of the accident given above is true in every detail. The writer witnessed the entire affair and has verified every statement made, by consultation with track officials and the surviving contestants in the fatal race.

After Hasha's machine struck the pole which threw the little Texan the rear wheel was ripped out and thrown high in the air. It fell in the infield and injured a spectator so severely that he died several days after the accident. In addition, one of the injured spectators in the bleachers also succumbed, these two with the four boys who were killed instantly and the two racers, bringing the gruesome total up to eight.

Hasha had finished a semi-match race with Seymour just prior to the start of the handicap, and when the judges called the race a dead heat the Texan protested vehemently. When he was about to start in the fatal handicap he turned to an official and said: "Watch me this time; there won't be another dead heat." The little speedster was excited as he got under way, and it is taken for granted that this excitement, combined with weakness resulting from an illness of the previous two weeks, brought on the collapse which left him unable to guide his machine. Hasha's body fell in the grandstand close to the seat which had been occupied only a few minutes previously by Mrs. Hasha. She is supposed

to have been in the infield when the accident occurred.

Immediately following the accident the track was placed under police surveillance, and on the following day police officials and the prosecutor made a careful examination of the scene. On September 17 the Grand Jury was charged to bring in an indictment of manslaughter, if after visiting the track it was decided that the management had been at all negligent in its arrangements for the protection of spectators. It was generally admitted, however, that the track officials should be held technically blameless, as the Newark bowl has from the start embodied several precautionary features not found on other board tracks throughout the country.

GRAND JURY PROBE.

Jurors Visit Scene of Vailsburg Accident.

NEWARK, N. J., September 17.—Judges Adams, Martin, Osborne and Dungan sat beside Chief Justice Gummere in the Supreme Court today when he charged the Grand Jury in regard to the recent disaster at the Vailsburg Motordrome. In opening Justice Gummere said he wanted to say a few words in relation to the disaster in which eight lives were sacrificed, and to point out possible criminality on the part of the management of the track.

Justice Gummere then pointed out that while a highly dangerous sport was being conducted it did not follow that the persons conducting it were criminally responsible for the loss of life. They were responsible to the riders to use care so far as it could be provided for their safety. The fact that the track may not have been constructed according to the best ideas would not warrant an indictment unless it was shown that it was constructed in a careless manner and with criminal negligence.

He further stated that the management was under obligation to the spectators to supply them with safe places whence to observe the races. The question was, Did they do that? He described the construction of the track as he had seen it after the accident and said that those of the spectators who met death were all in the front row.

"We now know," he said, "that the front row was dangerous, but in charging on criminal responsibility I must take the conditions as they were when the seats were placed there. Was there at that time any reasonable man who would have said that those seats were dangerous?"

He suggested that the jurors visit the motordrome and see the exact conditions as they were then.

THE NEW DAYTON

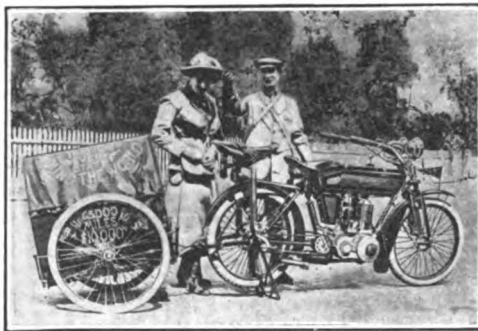
Seven and Nine Horsepower Models with or without Two-Speeds Listed by Davis Company.

FOUR types of the new Dayton motorcycle, manufactured by the Davis Sewing Machine Company of Dayton, Ohio, will be ready for the market within a few weeks, according to late bulletins from the factory. The Davis company will produce 7 and 9 h. models, with 2-speed device, and types of the same horsepower minus the two-speed equipment. The 7 h. model without two-speed will be listed at \$265; the 9 h. machine minus two-speed will sell at \$275; the two-speeded 7 lists at \$315, and the 9 with same equipment at \$325.

In the next issue of MOTORCYCLE ILLUSTRATED the new Dayton machines will be illustrated and fully described. The general specifications are given as follows: Motor, Spacke, 7 or 9 h., twin; carbureter, Schebler; ignition, Bosch magneto; muffler, Dayton; lubrication, gravity feed; control, double grip; transmission, chain drive with free engine clutch; tank, gasoline capacity 2½ gals.; oil capacity, 2 qts.; fork, Dayton spring fork; wheels, 28 inches; tires, United States, Continental or Goodyear 3-inch; brake, Lester "dead center" coaster brake; stand, folding type; saddle, Troxel or Persons; tool box, large metal type; front chain adjustment, ⅝ inch; clutch, Eclipse free engine. The company is preparing for heavy sales.

ON HENDEE ROAD STAFF.

WILLIAM REICHERT, formerly connected with the Chicago branch of the Hendee Manufacturing Company, and for the last year manager of the retail sales of the Wisconsin Motorcycle Company, of Milwaukee, is now on the traveling staff of the Hendee company, covering a western district.



"ROUND-THE-WORLD" TRIP.

THE accompanying photograph shows Mr. and Mrs. Humphries, the "round-the-world" Minneapolis tourists, ready for the start of their long grind. It will be noted that they have a trailer of novel design, this being necessary because of the fact that they carry a full camping outfit for emergency stops along the road at night.

DETURCK'S LONG TRIP.

HARRY J. DETURCK, of Los Angeles, Cal., who has been visiting in the East for some time, is now headed for Los Angeles on his motorcycle. From New York he went to Springfield, Mass., where his machine received a complete overhauling. The next move was to Boston. Following is an outline of the route pursued: From Boston to Buffalo and thence by lake route to Columbus, Ohio; from Columbus via the Old National Road to St. Louis, through Missouri, Kansas, Oklahoma, Texas, New Mexico, Arizona and into Southern California. The trip is entirely for pleasure and no effort will be made to establish any record, five weeks being allowed for the trip. Deturck rides a twin Indian.

MELVIN MEYERS and Chris Wagner, of Buffalo, rode a motorcycle, with sidecar, on a recent tour to New York and Chicago.

HENDEE BRANCH IN ATLANTA.

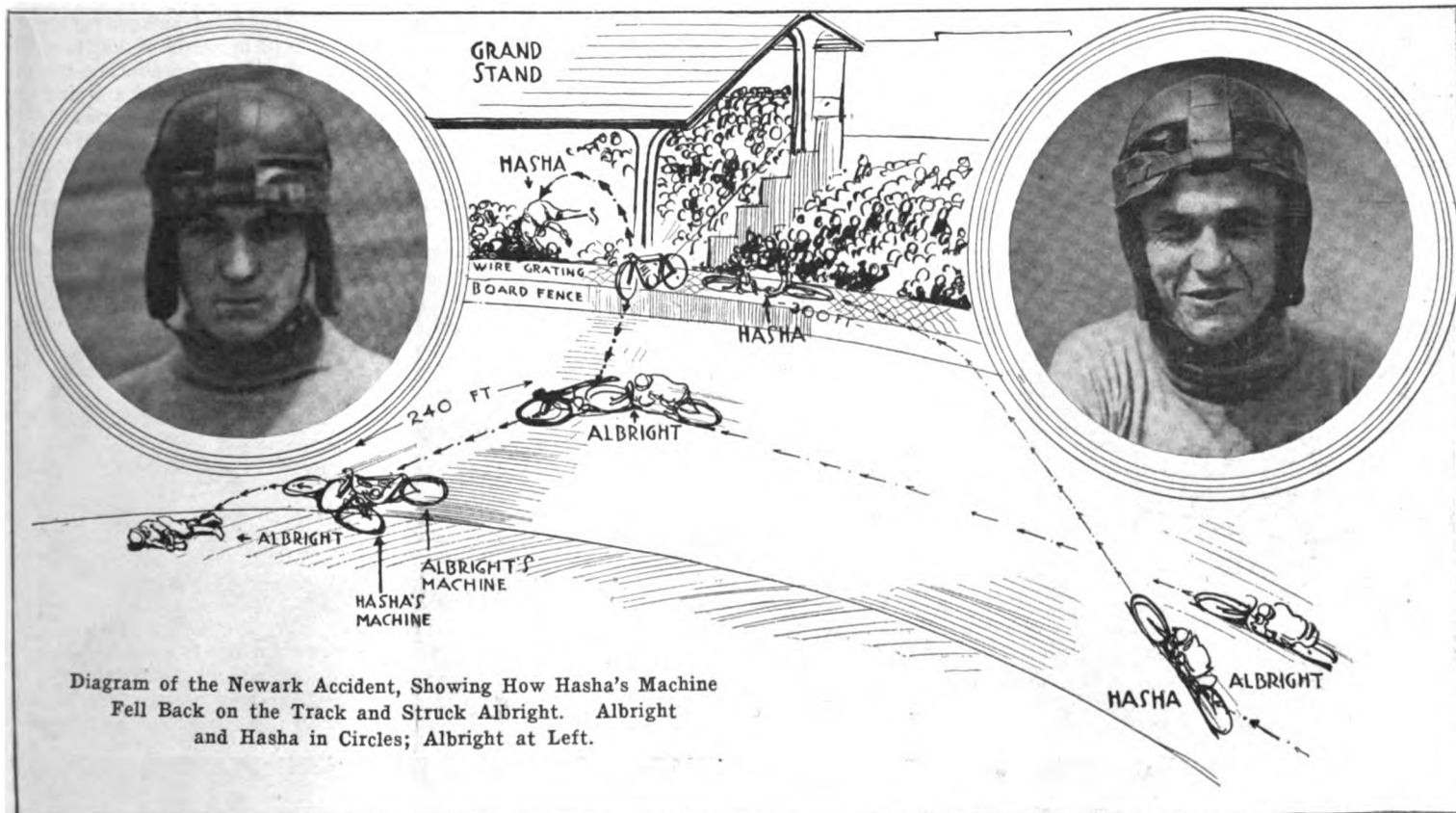
IN recognition of the rapid boom of the motorcycle in the Southern States, together with the widespread popularity of the Indian, the Hendee Manufacturing Company, of Springfield, Mass., announces that it will establish a factory branch and service depot at Atlanta, Ga., to enable the rapidly increasing business of that section to be handled more promptly and to save the delays in distributing machines and supplies from the factory.

As no suitable building was available, arrangements were completed for the erection of a new building especially designed and adapted to the requirements, on Peachtree street near Merritt avenue, consisting of two stories and basement, 125 feet by 26 feet, which will be ready for occupancy on December 1. Temporary quarters from October 10 until permanent quarters have been completed, have been arranged for and will be located at 157 Peachtree street.

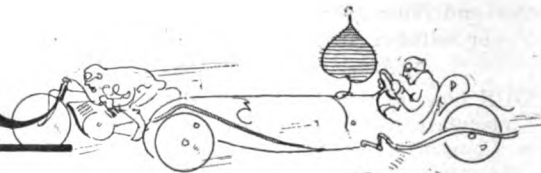
GOOD WORK IN CANADA.

THE roads and highways of Southern Ontario have become a great stamping ground for motoring tourists, both on two and four-wheels this summer, and the demand for posted routes has caused several organizations and corporations to go to the trouble of "blazing" the more popular highways. The Ontario Motor League, with the aid of the motorcyclists of Toronto, has been placing signs on main roads, while the Indian Refining Co., of New York, recently sent out a car to secure data on the roads of Ontario and Quebec for use in their Havoline tour book of 1913. The B. F. Goodrich Co. is placing trail blazers on the Ontario routes and their familiar metal signs will soon be seen.

For the benefit of international tourists the Niagara Frontier Club has erected large signs at the border points along the Niagara River warning the motorists of conditions and regulations.



The CYCLECAR



Why the Cycle-Car Came into Existence in England—Leading British Types—Their Chief Characteristics Briefly Stated—Future Possibilities of the Light, Speedy Outfits.

First Cousin to the MOTORCYCLE

‘ BRITISHER ’

I'M going to devote my space in this issue to a new design of near-motorcycle which is booming some on the British market. It owes its genesis to the demand for a soundly built and planned motor capable of conveying two people with the speed and comfort of a full-size automobile, and at little greater expense than a motorcyclist is accustomed to disburse. To understand the position one must review the past history of passenger motorcycles, which is as follows:

1900-1903. The quadricycle, consisting of a two-wheeled forecarriage attached by long sidestays to the rear half of the ancient De Dion and similar tricycles. Killed by want of power (engines ranged from $1\frac{1}{4}$ to $2\frac{3}{4}$), general unreliability and high cost (\$600 and upwards).

1902-1906. The trailer; basket chair, hung on two-wheeled axle, slung behind a motorcycle by a long rod. Killed by unsociability, inherent dangers and dusty position of the girl.

1906. Tricars. Three-wheeled chassis, with chair over two wheels in front. Prematurely born. Inefficient springing, unreliable engines and ignition, tendency to upset or become unsteerable when back tire deflated. Would stand a fighting chance today, now that engines and ignition are perfected; indeed many three-

wheeled 1912 cyclecars are only 1906 tricars reborn in a *fin de siècle* shape.

1908-1912. Sidecars. Cheap; machine easily convertible back to solo mount. Require little power to pull them. Sociable; comfortable.

Why are we not content with the sidecar? Any man who owns a motorcycle with a variable gear and an engine of at least $3\frac{1}{2}$ h. can add a sidecar for a small sum, and he immediately secures a passenger-carrying vehicle with the advantages detailed above.

Sidecar Characteristics.

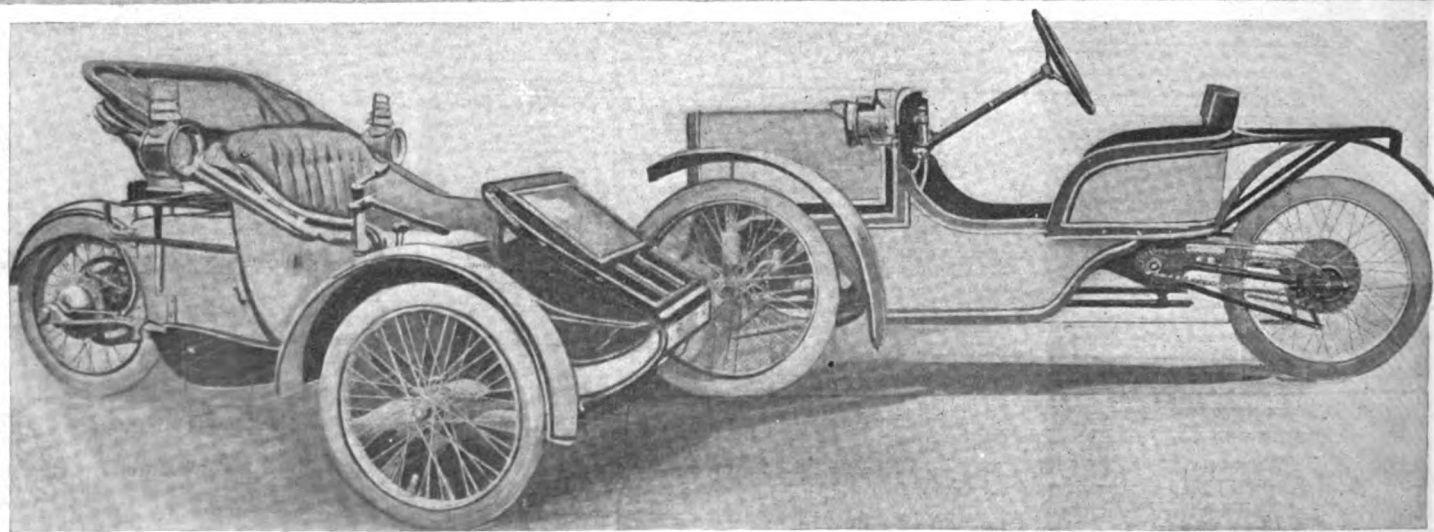
That the sidecar has a few drawbacks not even its most enthusiastic advocate will deny, but it is only fair to say that for the full-fledged roadster they are not very serious ones. To begin with, the lady must regard herself not only as a passenger, but as ballast. She must lean out round all corners and be prepared to do considerable shifting over rough going and on long jaunts. Few passengers, however, seem to object to a certain amount of this additional exercise. Then the luggage carrying capacity is small, although some makers are fitting a sort of rack in the rear on which a bag or suitcase may be strapped.

Even with fairly good springing on up-to-date sidecars it must be admitted that there is

room for improvement in this direction. Another point is that the width of the outfit occasions the maximum of wind resistance. Again, the single wheel has to stand heavy driving and braking strains and its tire is not remarkably accessible. While these and a few other minor disadvantages may not deter the average motorcyclist it is a fact that quite a number of sidecarists are in a mood to try out something new in the hope that it will give all the exhilaration and general enjoyment of sidecarrying with none of its drawbacks. Whether this can be done is the question engaging the attention of several leading English designers.

Introducing the Cyclecar.

In fairness to the sidecar it should be stated that over 20,000 of these attachments were in use on English roads last year, and that there is not likely to be any falling off in the demand for them. It is safe to say that for the great rank and file their popularity will continue to grow. However, the disadvantages referred to above have inspired upwards of 100 inventors to coquet with the idea of producing the perfect passenger motorcycle, and a weird crop of three and four-wheeled cyclecars is the natural outcome. When I say there is a "boom" in cyclecars, I do not mean that the



No. 1—The "Mighty Atom."

No. 2—The Morgan.

boom has settled down into a healthy commercial matter of supply and demand along fixed lines. I imply rather that many a young spark who has a sweet girl to drag about with him and knows where to raise \$500 is talking cyclecars, and that 100 factories are busy trying to cater for him. At least four of our biggest motorcycle factories have cyclecars on the stocks for the 1913 market, viz., the Clyno, Rudge, Humber, and Premier firms, and half a dozen patterns are already selling in fair quantities, though our national wariness makes many enthusiasts prefer to "wait and see."

Drawbacks of the Cyclecar.

I may next indicate the difficulties which hamper the designer of a cyclecar.

1. Price. We can buy a 6 h. full specification automobile, of really magnificent workmanship, for \$600, with first class coach-built body, hood and screen; or we can buy a four-seated Ford car complete and ready for the road for \$720. Secondhand samples of these automobiles in very fair condition are obtainable for \$500. The inventor must, therefore, sell his cyclecar new at not more than \$500, and he must offer for that outlay some attractions which a secondhand automobile cannot claim, e. g., cheaper upkeep, greater speed, or the like.

2. Comfort. It's easy to get the pace, and not difficult to get the low upkeep, but to make a vehicle scaling 600 pounds or so sit down flat on rough roads at 45 miles per hour is less simple. Moreover, there are no engines made which are suited for the job. You can get plenty of 8 h. V aircooled twins, but they are made for motorbikes; they have small flywheels, and they will not run slowly. When a cyclecar is standing at the gate, neither you nor the neighbors want its engine to buzz round noisily at 1,000 revolutions. At the same time great power is needed for the speed, and low weight is essential to the basic idea. Therefore you want a new type of engine, which can tick over at 100 revolutions per minute when the cyclecar is standing, and burble round at 3,000 to give speed on the level and power up a hill. If it can't burble round it will be heavy, and its heavy, slow impulses will demand a stiff and weighty frame. Good springs and cosy bodywork are necessary and must be obtained without piling on weight.

3. Light and simple transmission. By the time you have machined out a three-speed gearbox and differential axle and purchased 20 feet of chain, you may have a big hole in the \$500 catalog price. Belt drive seems indicated, but with belt drive a really low emergency ratio is awkward to devise, and when you start thinking of variable pulleys you butt up against a heap of patent legislation.

Some Specifications.

The accompanying pictures and summarized specifications give some notion of the lines on which successful designers are tackling the very complex problem.

The "Mighty Atom."

No. 1. The "A. C." Tricar or "Mighty Atom." This car is distinguished from the others by a long period of public service, during which it has acquired a high reputation and performed creditably in many competitions. As the cut shows, it is a glorified tricar of good workmanship and original design. It is well sprung, has an accessible back wheel, and is driven by a powerful single cylinder fancooled motor set amidships. The engine has a good range of speed and tugs like a

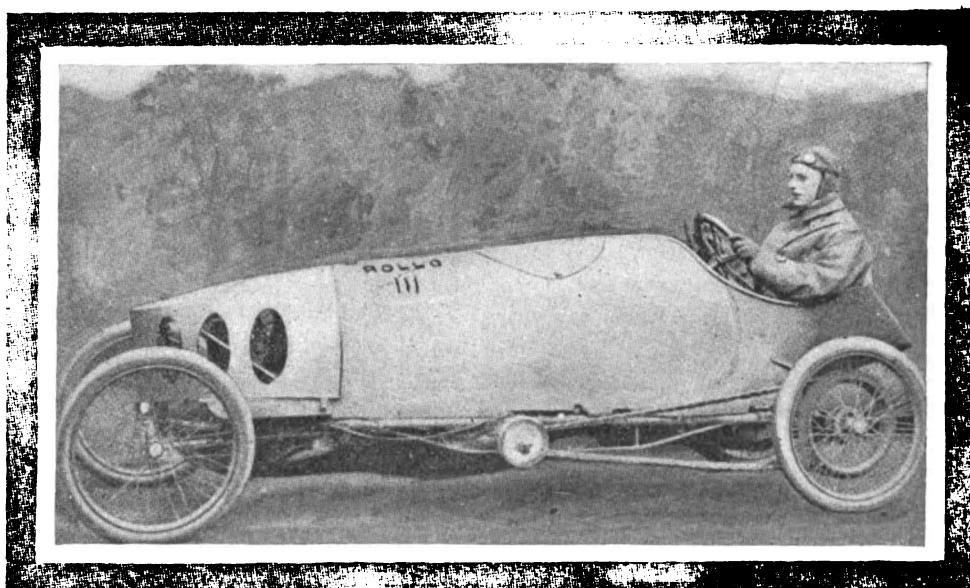
drayhorse; it is very steady running, having a huge external flywheel on both sides of the crankcase, fans being frictionally driven off the rims of both flywheels. The transmission consists of a single large chain driving a huge epicyclic hub in the rear wheel. The steering is by side tiller. This machine bristles with minor ingenuities, and is sincerely original from stem to stern. It has no defects which are separable from the limitations of its design, and can claim hundreds of satisfied users. It is used as a light delivery car by the Post Office and by many private trading concerns.

No. 2 is the Morgan Runabout—abviously just a glorified tricar; 8 h. V aircooled engine, 85 m. m. x 85 m. m. cooled through gauze front of bonnet. Leather cone clutch; propeller shaft drive to crown and bevel on countershaft, on which two sliding dog clutches couple up two separate chain and sprocket drives to the rear wheel. A successful machine in competition for two years past. Cost, \$425. Main

unless care is taken at corners, gear ratios limited by design of pulleys, naked belts, requiring periodic attention. Not much weight on rear wheels (this would only be a drawback on steep hills when greasy).

A Unique French Model.

No. 4. Bedelie (French). Cost ranges from \$280-\$600, according to engine fitted, which may be either a 3½ h. single, or an 8-10 h. twin. Narrow tandem type of chassis (many remarks above apply here). Ash frame, armored with fitchplates at angles. Three-point springing. Chain drive to countershaft, thence by twin belts, which dispense with need of differential. Free engine obtained by slackening belts. Cable and reel steering (not duplicated for safety, as on the Rollo). Variable pulleys, with only two ratio position locks. Main merits: excessive lightness (from 2½-3 cwt. according to engine power); this cuts both ways, making for speed and climbing, but reducing strength and com-



No. 3. The 8 h. "Rollo" Car—Brooklands Model.

merits: good workmanship, good springing, clever details (e. g., back rest is merely broad leather strap between two uprights, just as cosy as padded leather chair; gear lever is just a stub steel arm sticking out of gearbox on frame level, convenient to driver's right arm when hanging naturally over side of body). Main defects: high-speed engine, some difficulty in steering when back tire deflates, single driving wheel not tremendously accessible for tire repairs.

The Narrow Rollo.

No. 3. The Rollo four-wheeler. Cost, \$475. Practically unknown in competitions at present. Narrow tubular frame, designed for tandem seating (cut shows special racing body). Engine, 8 h. V aircooled twin, set behind gauze screen in front. Three-point springing—central spiral in front, two semi-elliptical laminated behind. Fan-assisted cooling. Chain from engine to countershaft amidships. Countershaft ends in two patented variable pulleys, whence twin lin. belts transmit drive to rear wheels. Main merits: good springing, very low weight—a man and a girl, one at each end, can lift machine easily. Tandem seating reduces wind resistance to a minimum. Simple construction throughout. Main defects: high-speed engine, bounceable at speed, easily upset

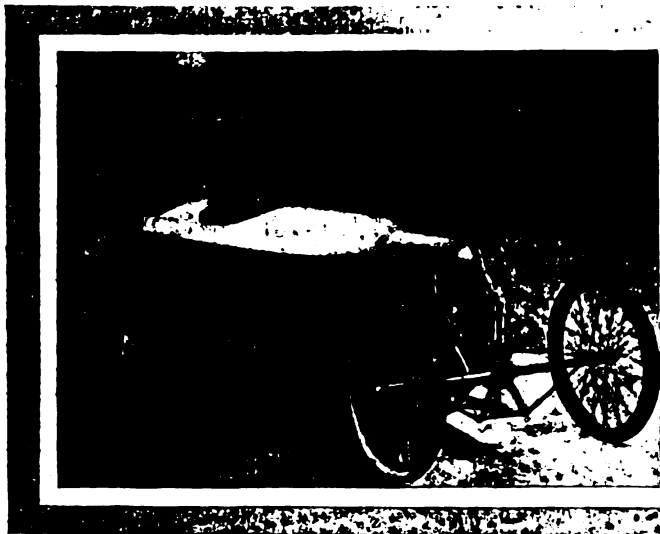
fort; specially designed engines (cylinders of twins set at 90 degrees). Main defects: notions on chassis are French, which do not quite accord with British; they are marked by lightness and ingenuity rather than by convention and staunchness. No great range in gear ratios (this is compensated for in part by very light weight, the vehicle clinging to top gear on all ordinary roads.) Narrow track reduces wind resistance, but does not fit cart ruts, nor afford great steadiness.

The Recently Arrived Carette.

No. 5. "C. M. C." Carette. I show a cut giving more insight into working parts of this vehicle, which has at present no public reputation, having recently made its debut. It is obviously a glorified tricar, with a particularly accessible back wheel. It sells at \$550, and its main success will depend partly on workmanship and partly on the extent to which the four-wheeled types make good.

Summing Up.

My own experience with cyclecars would suggest the following prophecies about the ultimate surviving type. It will probably be a four-wheeler, since in that design cheap tires are usable, tires are accessible, balance is better than with three wheels, and the tracks are



No. 4. The Bedelie.

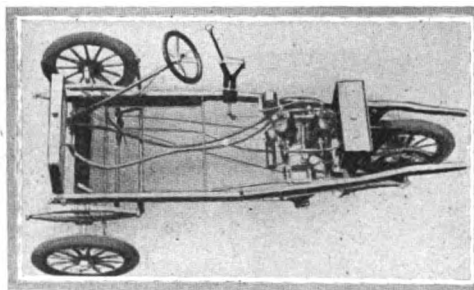


No. 6. The Autotrix Tri-Car.

better suited to roads scarred by horsehoofs down the centre.

It will have an air-cooled engine; it is easy to make an air-cooled engine which will keep cool on a light and speedy chassis, so that there is no justification for the expense, weight and complications of radiators, piping, and pumps. The engine will therefore be set at the front. The engine will probably follow a separate line of design. Existing motorcycle engines do not run slowly enough; existing car engines do not run fast enough. A big twin, set at 90 degrees, with two heavy outside flywheels and low compression ratios seems to be indicated.

It will be better sprung than any existing patterns. The transmission is likely to be by chain, countershaft, and twin belts. The chain—or other primary rigid unit—is necessary to give a gear reduction too low to be obtainable by pulleys; but the final twin belt drive, is in-



No. 5. C. M. C. Carrette.

evitable unless an expensive axle is to be incorporated. Twin belts slip just enough to allow the inside wheel to overrun round corners without producing a skid. Possibly a fixed ratio sliding gear may be preferred on many models, in which case side belts with

large countershaft pulleys would be retained, as a substitute for a differential axle. The body work will be very simple, to keep down weight and cost. A cross behind a deckchair and a hammock is likely to be evolved out of strong webbing and broad leather straps, depending from metal stretchers and hangers.

On some such lines as I indicate it is probable that light, four-wheeled 8 h. cyclecars selling at about \$500, will probably become standardized within a year or two. If the boom dies an early death, its decrease will be due to the folly of designers who make their specification too luxurious, and include three-speed sliding gears, with reverse, differential axle, coach-built bodies, etc., so butting up against the lesser automobiles, new and second-hand, and thereby automatically limiting the number of their sales, and the size of their outputs.

WHAT'S THE ANSWER?

THREE motorcyclists, charged with riding twenty miles an hour along the Ocean Parkway, in Brooklyn, N. Y., recently were fined \$10 each by Magistrate Nash in the Coney Island court, while three automobilists, charged with going from 28 to 35 miles an hour, got off by paying \$3 each. Naturally, the motorcyclists are in an unpleasant frame of mind. They want to know why the automobile owners were favored with three-dollar fines when the testimony showed them to be even more flagrant violators of the ordinance than the pilots of the single-trackers.

MUST HAVE LICENSE.

A LAW requiring all motorcyclists to carry a State license number went into effect September 9 in Kansas City, Mo., and will be rigidly enforced.

BACK FROM EUROPE.

FOUR New Englanders recently completed a 2,000-mile motorcycle tour through Europe. The tourists were L. M. Foss, Lynn, Mass.; J. C. Coughlin, Augusta, Me.; B. F. Crowley, Danvers, Mass., and J. M. Young, of Montrose, Mass. Young motored through England and France only, and was rejoined by the others on their return from Vienna.

FINE KANSAS ROAD.

MOTORCYCLISTS of Southern Kansas are elated over the completion of a good road from Independence, Kan., to Arkansas City, Kan., across the counties of Montgomery, Chautauqua and Crowley. The road is known as the "Oil Men's Road," and is ideal for motorists. Riders of the two-wheeler can make any time up to thirty miles

per hour over any part of the road. Some of the hills are very steep and tax a motor to pull them, but the rider can rush them almost any time, which makes the strain about fifty per cent. less. The road was put through as a kind of experiment, and has proven so popular that other roads are now being planned.

Fred and Hendon Vann, of Birmingham, Ala., recently made a trip to Washington, D. C., and return.





MOTORCYCLE MEMORIES & SOME WARNING TIPS

BY GEORGE M. JOHNSON

EVERY motorcycle rider has a fund of reminiscences at his disposal, and doubtless a few of them are more or less painful in nature. Some bring to mind occasions when the rider has played the part of an all-around bonehead—occasions which he blushes to remember—such as the time when he spent ten minutes pedaling his head off before a galaxy of admiring friends in a vain effort to make that new boat chug-chug for them, only to discover, after listening to fifty-seven varieties of suggestions, that he had neglected to turn on the gas.

Some of these fond memories, however, may not be due to a temporarily ossified condition of the rider's brain; they may be simply hard luck records, such as bumping over a broken beer bottle after dark, with disastrous results to a new tire; or running out of gas far from home. And losing things on the road! My losses have been painfully numerous. I started forth on one tour with an extra supply of both gas and oil firmly (?) strapped to the luggage carrier. After riding fifteen miles I happened to glance back at said carrier; it was still there, but the spare cans of gas and oil were gone.

A Tool-Box Experience.

It is heartbreaking to observe how tools get away. I had a peculiar experience along this line during my first riding season, and that was four years ago. I had taken a trip of about twenty-five miles outside of town to visit some friends, nothing of importance happening on the way out save an exciting brush with an automobile. Needless to say, I easily left the four-wheeler in the rear. When I reached my destination, I was quite grieved to see that my tool-box was missing; it had come loose from its moorings somewhere on the road, and there was little use to go back and look for it, as I had no idea where the loss had occurred, and the road was so constantly traveled that some one would be sure to pick it up in a short time. I made a few appropriate remarks, and then sat down in an easy chair to rest and compose my shattered feelings.

Presently I noticed that an auto had stopped in front of the house, the very car I had raced against. The occupants were looking at my motorcycle, which was on its stand in the yard. I went out, and was decidedly gratified to learn that they had picked up my tool-box, which had left me about the time I left them. When it struck the ground, under the impulse of a forty-five miles per hour speed, it had burst open, scattering the contents in all directions, but those kindhearted people

had recovered practically everything. Not many automobile parties, I venture to say, would have been so considerate.

A Thoroughgoing Thief.

Another tool-box adventure of mine did not come out so well. I had been visiting a friend in the city one evening, going around to his home via machine. After an hour's call I went out to the motorcycle for my return trip, but as I turned on the gas in my Presto tank, I made a truly startling discovery.

"What's the matter?" exclaimed my host, who had come out to witness the departure.

I explained what the matter was in very vivid language. Some town "mucker" had gone through my tool-box and extracted everything there save my license and a spare spark plug. I have no idea why he left those articles, and suppose I should have been grateful for that slight favor, but I was not. My losses summed up as follows: Monkey wrench—50 cents; pliers—50 cents; two special wrenches at 30 cents each and one at 25 cents—85 cents; tire repair outfit—50 cents; screw-driver—25 cents. Total loss—\$2.90. The moral of this little episode is easy to see. Have a lock on your tool-box. I did so on the outfit of new tools, but that is considerably like locking the stable door after the old plug has been taken; it is much better to put the lock on *before*. It is a mighty mean person who will go through a tool-box in that way. Most of the things there would be practically useless except to the rider of a motorcycle, but as some of us have discovered, there are altogether too many mean people in the world.

That was not the only time objects have been lifted from my motorcycle. I once had a dollar watch fastened to the handlebars, as a convenience when on the road. The scheme did not work very well, for the watch soon began to run irregularly. I suppose it was not built to stand the strain of jolting over rough roads at thirty miles an hour. The watch was so worthless that I wound it less than half the time, and finally I ceased to wind it entirely, for one night when my fiery steed was waiting for me outside the city library building, a mucker collected the indicator. He doubtless thought he was making a rich haul. I only hope that he tried to go to work by that watch next morning, and lost his job for being late.

How a Gun-Case Disappeared.

In the open season I often go hunting via motorcycle, putting my "take-down" shotgun into its case, which is then thrust into the roomy rear game-pocket of my shooting coat. I formed the habit of leaving my machine in

any convenient place, having almost a child-like faith in the honesty of my fellow men, and also relying on the fact that in those unfrequented regions people were not likely to pass by so very often.

One day last fall I made a run out to a small lake up in the country after ducks. The ducks did not materialize to any alarming extent, however, and then I decided to take a chance at rabbits in a good place a mile or so from the pond. I left the main road, riding my machine along a little path that led across a brook, and there leaned the motorcycle against a tree until I should return, the gun-case resting across the saddle. I was gone not much more than half an hour, and on my return found that some miserable wretch had absconded with my gun-case. The strongest adjectives I could call to my aid—and some of them were pretty strong—did not bring back the missing article.

Locating the Moral.

These reminiscences bring home the fact, regrettable though it is, that the world has a fair sprinkling of people who have absolutely no respect for the property of others. Whether you as a motorcycle rider have suffered in this way or not, there is in the foregoing incidents an important lesson. Never leave any attachments on your machine that can easily be removed. Have a lock on your tool-box, and keep it fastened. Never leave gloves or leggins on the machine; take them into the house with you. If you have a watch on the handlebars, be sure that the clip or attachment which holds it is one that requires some effort to dislodge, and if you plan to leave the machine unprotected for a considerable length of time, it is better to take the watch off yourself, unless you prefer to risk losing it. Whether in the city or country, your possessions are never safe, and to leave a motorcycle in such a place that some light-fingered individual has access to it, is to go looking for trouble.

Machine Lock Is Needed.

And there is one thing more. You all have seen ads. in the trade journals such as this: "STOLEN—1911 Model of Blank motorcycle; color, red; engine number, so-and-so. Reward for information leading to its return." Motorcycles are becoming so common now that we can expect these robberies to become more and more frequent, and goodness knows they are frequent enough already. A good many persons are getting familiar with the management and control of the leading models—persons who would be perfectly willing to steal a motorcycle if they had the chance.

Everyone knows in what a systematic way bicycle thieving has been carried on.

If you leave your motorcycle unprotected longer than a very few minutes, the only safe thing to do is to lock it; not merely lock it so that the engine cannot be run—a thief could easily push the machine away into a safe place, there to deal with the matter at his leisure—but to lock it so that either the front or rear wheel cannot be turned. No person is likely to carry away a motorcycle. A good husky chain and husky padlock may be a combination decidedly awkward to carry in an already overcrowded tool-box, but it is far better to take that trouble than to lose a two hundred or two hundred and fifty dollar machine. This is the only sure way to avoid the most painful motorcycle memory that one could have—the memory of a new 1912 twin that was stolen before its happy owner had ridden it a thousand miles.

NEW YORK TO PHILADELPHIA.

HARRY H. J.—From Broadway and Fulton street go down Greenwich to Cortlandt street, where turn west and take ferry to Jersey City (Penna. R. R.). At ferry go out York street to city hall, then turn into Mercer street, on which run to Hudson County boulevard. Go north on boulevard to Turnpike and follow Turnpike to Newark, Broad and River streets. Go on toward library and turn left into Washington street on which continue to intersection with Clinton avenue. Turn from Clinton avenue to Elizabeth road (trolleys) and follow into Elizabeth along North Broad street. At Westfield avenue, Elizabeth, go to right and follow out to Cranford, Garwood, Westfield, Fanwood and Plainfield. From 5th street and Park avenue, that city, turn right on Park avenue going under railroad at Plainfield Station. Follow trolley through Dunellen; go on and pass Bound Brook (8.1 miles from Plainfield). Go into Bound Brook and enter New Brunswick (7.5 miles on).

From New Brunswick go 9.5 miles to Dayton, then Hightstown, Windsor, Edinburg and Trenton (latter city is 32.2 miles from New Brunswick). From Trenton, State and Broad streets, go to Philadelphia via Langhorne, La Trappe, Bustelton, and Ogontz. Distance, 35 miles. Get a New Jersey license for this trip.

NINTH TRIANGLE RUN.

OCTOBER 6 is the date set for the ninth annual Triangle Run of the Providence (R. I.) motorcycle club, always considered one of the banner runs of the year for New England. The start will be made from Providence at 7 a. m. The riders will leave Boston at 10 a. m. and Worcester at 1 p. m., arriving back in Providence at 4 p. m.

The entry fee is \$2. Applications may be forwarded to B. A. Swenson, at Providence. Mr. Swenson has guaranteed free storage for motorcycles and side-cars to the number of three hundred for out-of-town entrants, and free sleeping accommodations are being arranged for a limited number. Medals will be awarded to all who finish the run.

ON BUSINESS TRIP.

JAMES C. DEVITT and Clifford Macbeth, of St. Paul, Minn., are riding motorcycles on a business trip from St. Paul to Chicago and Milwaukee. At Chicago they will be joined by Thomas and Homer Milton, of St. Paul, who are returning from a motorcycle trip to New York.

ON 3,000 MILE TOUR

Mr. and Mrs. Moody Experienced No Machine Trouble on Tandem Trip from Minnesota.

MR. AND MRS. E. S. MOODY, of Glencoe, Minn., recently completed a long tandem motorcycle tour. The general route taken was from Glencoe to Buffalo, N. Y., with allowances for many side trips. The distance covered was 3,718 miles, 3,071 of which was on an Emblem motorcycle and the remainder in an automobile.

They left Glencoe June 28, going to La Crosse, and then via Madison and Milwaukee, Wis., to Wilmette, a suburb of Chicago. They arrived there July 15. Sand and steep hills, together with bad weather, made progress slow through Wisconsin.

A few days' rest was taken by the tourists, and they then went in an automobile accompanied by Mrs. Moody's mother and sister to Fremont, Mich., and visited Mr. Moody's brother, whom he had not seen for 12 years. They returned to Chicago, and after a short visit left again for the East on their motorcycle on July 26, going by the way of South Bend to Toledo. From Toledo they went via Cleveland, Ohio, and Erie, Penn., to Buffalo, N. Y., reaching the latter place on July 31. They went to Niagara Falls and viewed the American and Canadian falls, and also went to Angola, home of the Emblem motorcycle. Mr. Moody is the Glencoe agent of this company, and he and his wife were royally entertained by officers of that company during their sojourn in Angola. They started on their return trip on August 4 and reached Chicago on August 7. They left the windy city following a four days' rain which made the roads heavy and slippery and traveled via Clinton and Cedar Rapids to Waterloo, Ia., and then proceeded to Minnesota Lake, arriving there on August 16. Mr. Moody went on to Glencoe on August 23, while his wife remained to make a more extended stay with her parents.

Mr. Moody says the roads east of Chicago were very good, being mostly macadam. He was fortunate in not having any trouble with his machine during the entire distance, except for one puncture.

DRACHMAN'S HARD TRIP.

LEO H. DRACHMAN, of Perham, Minn., who recently completed a motorcycle trip from Chicago to Buffalo and back, tells of bad weather and rough roads encountered.

He rode from Chicago to Maria Stein and St. Henry, Mercer County, Ohio, and after a ten days' stop struck out for Buffalo. On account of excessive rain he only got as far as Newton, a small town 24 miles east of Cleveland. He then went from Cleveland to Buffalo by boat. From Buffalo he took a spin to Niagara Falls. The return trip was very hard on account of rain. He rode 100 miles on low gear, and remarks: "You can imagine what kind of roads I had, when it was necessary to do that."

ABERDEEN TO MINNEAPOLIS.

A. J. EDDY, F. J. Parsch and G. E. Petrick, motorcyclists of Aberdeen, S. D., recently completed a trip from Aberdeen to Minneapolis. The distance covered was about 1,000 miles and the riders made it in four days.

The start was made from Aberdeen at 5 a. m. and the riders reached Minneapolis at 7 p. m. the next day. Except for a bad stretch of 80 miles they found good roads. The return trip was started at 9 a. m. the next morning and after two days' traveling they reached home at 7 p. m. They averaged over 200 miles a day.

ON SOUTHERN TRIP.

HOWARD R. COOK, 18 years of age, recently reached Indianapolis on a motorcycle trip from Cedar Rapids, Iowa, to Atlanta, Ga. He is riding a Flying Merkel. Cook visited Keokuk, Iowa, Springfield, Ill., Danville, Ill., and other towns en route. He had traveled five days and had experienced no trouble except with his rear tire.

J. J. REID, of San Diego, Cal., riding a Thor IV, has just completed a 3,500 mile trip along the coast. His expenditure, for supplies was only \$15.

A. W. and A. L. Leppard, ranchmen of Burden, Kansas, do all their traveling on motorcycles, and the latter is now en route on a trip to Texas.



Three Pope Riders of Rio de Janiero, Brazil.

A MEET IN MANSFIELD.

MOTORCYCLE races were featured at the fair held in Mansfield, Ohio, on September 4. The five-mile amateur race was run in 7:25½, Evans being first, Ticknor second, and J. Hill, third.

In the ten-mile amateur race Marshall won first, Evans second, and Ticknor third. Time, 16:41.

In the five-mile trade riders' race C. F. Williams won first, R. Gardner second and W. Thuma third. Time, 7:10½.

In the ten-mile trade riders' event C. F. Williams won first, R. Gardner second, W. Thuma third. Time, 15:54.

In the pursuit, free-for-all, C. F. Williams took the race. In the last event, the 25-mile free-for-all, C. F. Williams came in first, A. O. Lemon second and C. Ticknor third. Time, 38:10¾.

FLANDERS SET THE PACE.

AGAINST a field of single and two-cylinder machines, the Flanders "4" captured first and second prizes in all events at the New Haven (Mich.) home-coming week motorcycle races. While this meet was an unsanctioned affair, the results of the races show that while the Flanders folks never claim to be producing a racing machine, it can "travel some."

The Flanders Company does not expect at present to enter a racing team in speed events, preferring to leave contests of this kind to individual riders, who, of course, must use stock machines, as the Flanders Company has not as yet built any machines for racing purposes.

RIDERS DISAPPOINTED.

ANNOUNCEMENT was made recently that an aero exhibition company would hold a combined aviation and motorcycle meet at the Brunots Island track in Pittsburgh, Pa., and a number of Pittsburgh riders turned up their machines and went to the course prepared to compete. Rain interfered with the program, and when the track was finally in condition for riding it developed that the management could not produce an F. A. M. sanction for the races. The boys refused to ride, and feel that they were bilked. They are doubly peeved because of the fact that the Brunots Island track is not easily accessible.

RACING AT WILLIAMSPORT.

ARACE meet held recently under the management of W. A. Myers, Indian agent in Williamsport, Pa., brought out a good crowd of fans, and afforded several interesting finishes. In the 5-mile open event Roth (Indian), took first place; Pineau (Indian), was second, and Bostley (Indian), third. Time, 6:22. In the 10-mile open race the same riders finished as in the 5-mile event. Time, 12:48.

GODFREY'S FINE SHOWING.

IN the recent Circuit de Fontainebleau, held in France on August 25, Oliver C. Godfrey, best known as the winner of the 1911 Senior Tourist Trophy on the Isle of Man, finished first on his Indian twin in competition with French and other English cracks. Godfrey covered the distance of 279 miles in 6:34:59, over varying conditions of road surface. His machine was fitted with Coventry chains on both drives.

OKLAHOMA CITY MEET

Feature of Big Program Was 113-Mile Road Race in Which McMichael Led the Field.

MOTORCYCLING is viewed with much more interest and enthusiasm than heretofore in Oklahoma City, as a result of a successful race meet recently held in that city. The course was around the grand boulevard, which circles the city and covers a distance of 28½ miles. The contestants were all members of the Oklahoma City motorcycle club.

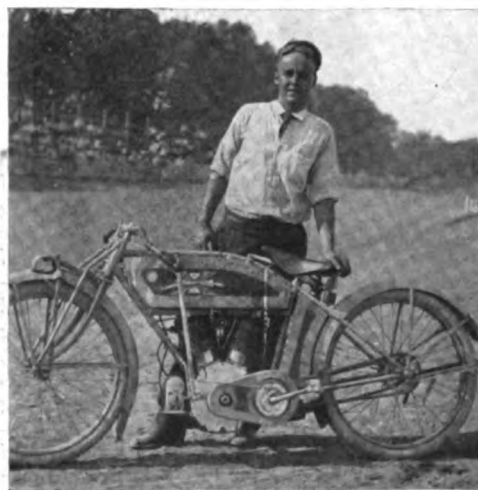
Considering the dry, dusty and sandy condition of the road, the time made is considered very good. The fastest laps were; twins—M. M. Murray, Harley-Davidson, 32:45; singles—McGranahan, Indian, 35:45. The feature race covered a distance of 113 miles, and was won by Jess McMichael, twin Harley-Davidson, his time being 2:28:45½. The following riders finished in the order named: M. M. Murray, twin Harley-Davidson; McGranahan, single Indian; Churchill, twin Indian; Renhardt, single Indian; and Stedden, single Harley-Davidson. Plans are now being laid for a meet next spring, and an effort will be made to obtain some of the best riders in the west to compete.

COLUMBUS ENDURANCE RUN.

COLUMBUS, O.—The reliability run planned by the Columbus Motorcycle Club for this month will cover a course of 90 miles. The route will probably lead through Linden Heights, Westerville, Sunbury and Worthington, with several secret controls en route. William Wells, chairman of the run committee, states that the event will be pulled off within two weeks and that practically the entire club membership will participate. A number of the local amateurs are planning to enter the race meet to be run at Powell, Ohio.

CASE IN A SPILL.

FLOYD CASE, while riding a twin-cylinder stock Excelsior machine in an exhibition five mile race against time at Coffeyville, Kan., recently, was thrown and painfully in-



Floyd Case, Coffeyville, Kan.

jured, the result of his mount skidding. The dust on the track was almost three inches deep on the stretches and deeper on the "corners." In spite of this handicap, Case rode three miles in three minutes and twenty seconds.

BAKER IN RECORD TRIAL.

COLUMBUS, O.—Close and exciting finishes characterized the Labor Day race meet at the local motordrome. Hare, Woolley, Yates and Birkenbach, furnished the chief thrills and tied for the honors. F. G. Baker, the Indianapolis rider, endeavored to shatter the world's 300-mile record during the morning, but was compelled to give up his trial in the 145th mile because of a broken cross head pin. Baker covered the 145 miles in record-breaking time, being clocked at 129 minutes.

A FATAL SPILL.

CLEVELAND OLIVER, of St. Louis, Mo., 26 years of age, sustained fatal injuries in the first event held at the St. Louis Motordrome recently. Oliver was riding at the rate of 65 miles an hour when he lost control of his machine and was thrown 40 feet into the air. The accident was due primarily to his inexperience, he having ridden only one month prior to the meet.

WESTMORELAND RACES.

WESTMORELAND COUNTY motorcyclists held a race meet in connection with the annual fair at Youngwood, Pa., Thursday and Friday, September 12 and 13. On the first day, 10 and 15-mile races were carded. For the second day, five mile and 25-mile races were on the program.

OKLAHOMA CITY BOWL.

CAPITAL has been subscribed and plans laid for a saucer track in Oklahoma City, Okla. E. C. Clark, who is behind the movement, believes that Oklahoma City is so located as to make motorcycle racing a success during the winter season.

CLOSING PROGRAMS.

THE races scheduled for Labor Day at the Riverview Motordrome, Chicago, were postponed until September 7 and 8 on account of the wet track. These races closed the Riverview season and the riders are on their way to California to participate in the coast meets during the winter.

SCOTHORN INJURED.

FRED SCOTHORN, secretary of the Coffeyville (Kan.) Motorcycle Club, while riding his two-wheeler on the race track, and watching Ora Clossen, a racer, do a fast mile, collided with the outside fence and crushed his right foot.

BENNETT GOING TO THE COAST.

WELLS BENNETT, of Wichita, Kansas, who has carried off the honors in many events held in Wichita and neighboring towns, has been booked to take part in the races in Los Angeles this winter.

TWO NEW MARKS.

E. G. BAKER, of Indianapolis, recently rode 72 miles in 50:57, and 94 miles in 1:15:22½ on the Columbus (Ohio) half-mile board track. The previous unofficial records are given as being 53:18 and 1:20:24.

A MOTORCYCLE DAY.

THE directors of the Montgomery County fair, which is held at Coffeyville, Kan., have decided to hold the fair one day longer, and turn the day over to the motorcycle riders. A racing meet is now being arranged.

ARTHUR STANDIN, of Oberlin, Ohio, recently featured at a St. Louis (Mo.) race meet by covering 24 miles in 20:03.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

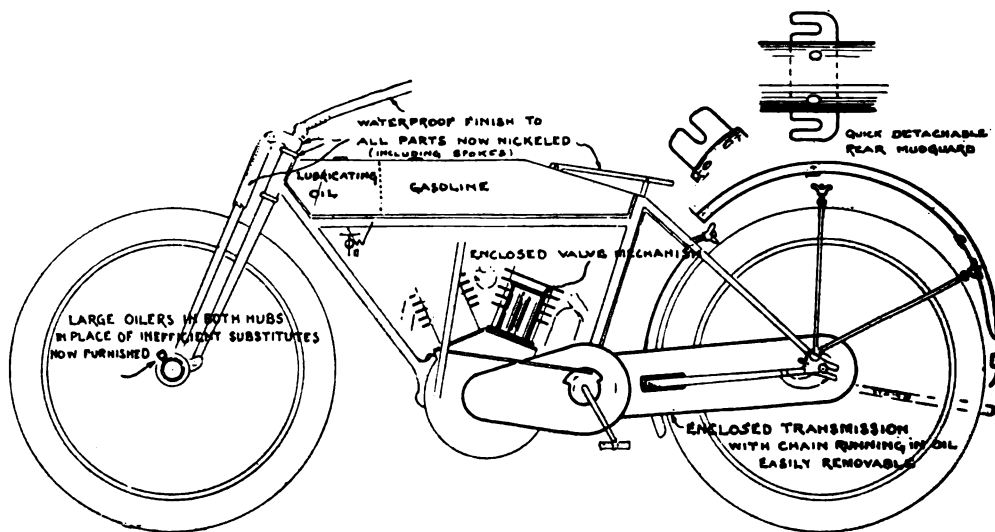
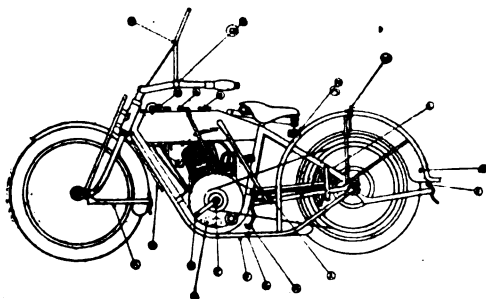
1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

VARIETY OF IMPROVEMENTS.

HERE are a number of very practical improvements. A front wheel stand and mudguard brace combined is shown at A, and B is an air-chute to the motor; a hole cut in the fender having the edges turned outward to force a column of air against the cylinder. C is an oil pipe from the tank connected to the oil circulating system, and the amount fed is regulated by a screw. D-E is a starting device, consisting of a hand-crank having a ratchet engaging with another ratchet on the crankshaft; a spring keeps the ratchets normally apart. The crank is engaged by pushing in and operates like that on an automobile. F is a foot-board frame of steel tubing attaching at the rear to the rear axle ends and curved over near the fork head and down the opposite side. Clamp fastening is used and cross bracing by tubular stays to the frame give stiffness. The footboard G is of sheet metal 7 inches wide and forms a fender on both sides of the machine, and also acts as a belt-shield. Footboard is stiffened by wood strip on under side.

An emergency foot-brake is shown at H, and also combines a free-engine control. Pushing H forward causes pin I in the brake rod to act on free-engine lever and disengage clutch, while shackle-brake L,



acting on a special belt rim on inside of belt pulley, brakes the wheel. A spring normally holds L out of contact with the rim. The toggle arrangement allows of tightening the belt, and there is an adjustment by holes in the brake rod at the pedal end. The service brake is on the off side and operates the regular coaster by a pedal. Three-inch tires (J) are used and the fenders have sufficient clearance to allow of using tire-chains. K is a side to mudguard continuous on both sides from front to rear of rear wheel. It is hinged at KK to facilitate getting out wheel. M is a slot in the fender to give free movement of saddle springs.

N and O are 2-inch filler caps on the gasoline and oil tanks allowing of easy filling in case a funnel is not at hand. P is a sight-feed oiler, fed by a gear-pump driven by the motor. The feed is thus visible to the rider at all times. Q is a cross-bar brazed to the handlebars to strengthen them, and R a

metal-framed, celluloid wind-shield fastened to Q and braced by rods from the bars. Wind-shield folds on bars when not required. Contributed by Victor Perry, Batavia, N. Y.

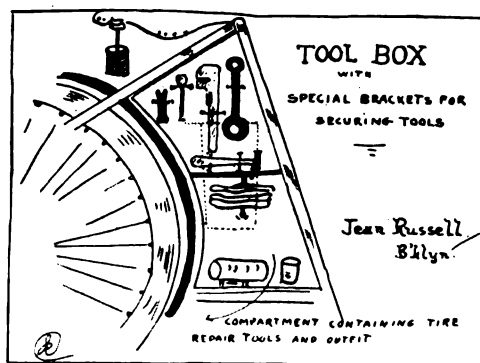
PROTECTING RIDER AND DRIVE.

AN enclosed drive, with chain running in oil and case readily removable to replace and adjust chains, protects the rider and transmission likewise. A detachable rear mudguard permits of the tire and wheel being quickly repaired and is essential where a tandem or carrier is fitted. Fastenings are by wing-nuts and slotted lugs. When valve mechanism is enclosed, wear is saved and motor kept free from oil, etc. Lubricating oil tanks should occupy forward compartment of main tank, keeping rider clean and enabling observation and ease in use of hand-pump. Large oilers on front and rear hubs in place of ball-oilers,

etc. Water and rust-proof finish on all parts now nicked, giving a true all-the-year-round machine. Universal lamp brackets and fittings needed. Contributed by Thomas O. Wansleben, Washington, D. C.

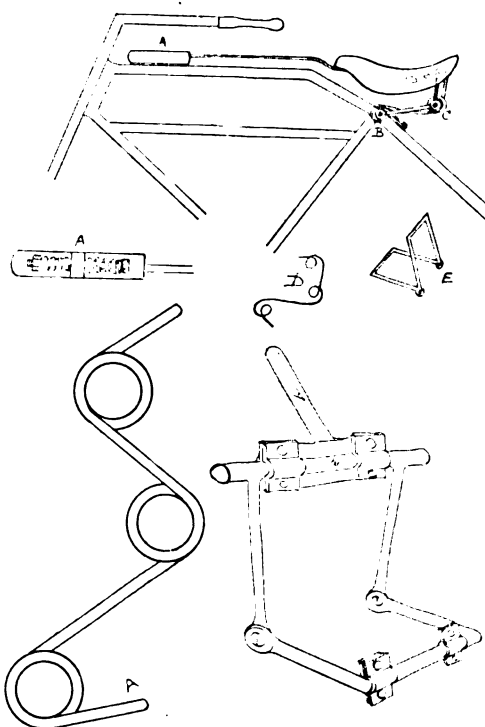
TOOL BOX ARRANGEMENT.

IT is the usual but disagreeable fact that the tool one is hunting for is generally at the bottom of the box. Special brackets or hangers should be fitted within the tool-box to carry the tools. The box itself is to be divided into two compartments: One for motor, and the other for tire tools and repair outfit. Submitted by Jean Russell, Brooklyn, N. Y.



SPRING SADDLE FITTING.

A SADDLE supported by double coil springs B and controlled as to fore and aft movement by fitting A. E is a shackle device preventing side rocking. Details enlarged show shackle construction with seat post A and axle B, and coils in springs D. Contributed by Alfred T. Mason, Pittsfield, Mass.

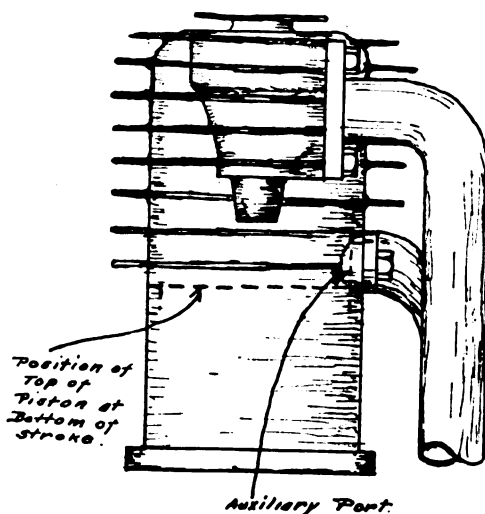


GASOLINE FILTER.

ONE of the vital necessities to the rider, particularly he who tours, is a gasoline filter or strainer. One such device with a settling chamber is here shown, the filtering medium being a chamois disc S. The device consists of two chambers A the filter-chamber, and B the settling-chamber. B has a removable cup G and a rod F which projects into the passage E and holds a steel ball off its conical seat. Gasoline enters from the tank at C, passes through A, and S to P which is connected to the carburetor. On removing cup G, the ball seats itself, closing E, and any water or dirt can be removed from G without leakage from A or interruption of the flow of gasoline to the carburetor. On replacing the cup, the ball is lifted and B again acts as a settling-chamber. Contributed by Chas. R. Chickering, Philadelphia, Pa.

AUXILIARY EXHAUST.

TO decrease the power-loss due to overcoming the inertia of the burning charge during the first portion of the exhaust stroke, the motor can be ported, but to prevent loss of oil, taking in of dirt, etc., the ports should be connected by a pipe to the regular exhaust manifold or pipe, as in the illustration. Contributed by J. H. Measer, Fairmount, Ill.



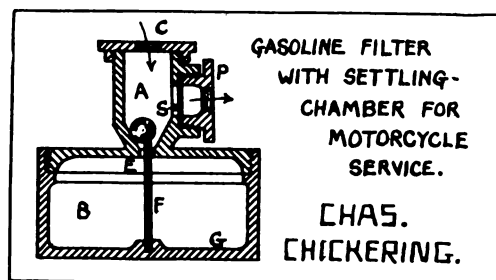
WANTS PITTSBURGH SANCTION.

W. T. DONOVAN, of 2132 Fairmount road, Cleveland, Ohio, has forwarded an application for a restrictive racing sanction to cover the city of Pittsburgh, Pa., accompanied by a check for \$100. The matter has been referred to the F. A. M. Board of Directors.

MR. AND MRS. CLINTON JOHNSON recently completed a motorcycle trip from Topeka, Kan., to El Paso, Texas, a distance of 1,500 miles.

THE Brockton (Mass.) M. C. recently conducted a successful Sunday afternoon run over 123 miles of sea coast road.

MOTORCYCLES are being used by the officials at the Fort Collins (Colo.) U. S. Experiment Station in conducting investigations throughout the State.



THE PHILIPPINE CENSUS

Motorcycles Registered Under New Motor Vehicle Law Total 287—Climate Hard on Battery Models.

MANILA, P. I.—The Philippine Island authorities have just published the list of motorcycles registered under a new motor vehicle law, passed at the last session of the Philippine Assembly. There were 287 machines registered up to July 31. Of these there are 204 Indians, 51 F. N.'s, 7 Pierces, 5 Humbers, three each Pope and Singer, two each Harley-Davidson, Minneapolis M. M., and Reading Standard, and one each Condon, Emblem, Merkel, N. S. U. and Thor. The machines registered by private owners number 149, the remainder being owned by the different insular government bureaus, provincial governments, Manila police (7) and the U. S. government, War Department (6).

The motor vehicle act does not apply to the Mountain Province or to the island of Mindoro. In the former there are perhaps half a dozen machines. No doubt there are some machines not in use, and these have not been registered. The writer knows of four N. S. U.'s, two Emblems and four Minneapolis models not in service. There are also agencies of the Flanders and Iver Johnson machines in Manila, with demonstrating machines on hand.

The climate here is very unfavorable for the use of battery machines, and machines using belt-drive as a rule are unsatisfactory owing to the rapid deterioration of rubber and leather goods. It is a lucky rider who can get a year's use from either tube or casing—but the riding season in the Philippines, where there are metaled roads, is about 360 riding days. Tires go to the bad rather quicker if they are not ridden than if in constant use.

Of the 287 machines in use here perhaps not more than the odd seven have belt drive, and new machines with battery ignition are practically unsalable. Careful attention to these two points may save intending shippers from disappointment, if they have thought of invading the Philippine market with obsolete equipment.

A CLEAN SWEEP.

BALTIMORE, Md.—The racing team of the Maryland M. C. made a clean sweep of the races at the Timonium Fair, in Baltimore county, on Saturday, September 7. These races were the first of their kind to be pulled off at the fair, and so tickled was the management with the success of the events that an exclusive motorcycle meet will be staged before the winter months set in, probably on Thanksgiving Day. The summaries:

Two-mile novice; Raymond Reckord (Indian), first; Walter Hammond (Indian), second; Carey Mears (Indian), third. Time, 3:16.

One-mile sweepstakes; Freddie Tiemeyer (Indian), first; G. H. Heinz (Indian), second; Reckord (Indian), third. Time, 1:26.

One-mile time trials, flying start; Tiemeyer (Indian). Time, 1:14½.

Three-mile handicap; Reckord (Indian), 25 seconds, first; Tiemeyer (Indian), second; Hammond (Indian), third. Time, 3:57.

The officials were: William Wood, referee; H. M. Gault, G. Brouhard and George Warmbold, timers; W. H. Snyder and George Eliason, judges; E. D. Allard, clerk of course; Howard A. French, starter.

QUESTIONS and ANSWERS

VERY gratifying were the answers to Question No. 4, viz.—What is a flywheel and what are its functions? The question brought out the largest number of answers of any of the series so far and all showed considerable understanding of the dual functions of this important piece of gasoline motor mechanism. In fact, the decision of the Editor was only made after several readings of each of six replies, and the winner was decided to be Lester E. Milkey, of Sandusky, Ohio. The second prize goes to A. F. Clement, of 204 East Franklin St., Mansfield, La.

The Editor of the Questions and Answers Department calls the attention of contributors again to the full answering of the questions to be found in the box below. Incomplete answers disqualify many competitors.

Two cash prizes of \$5 and \$3, respectively, will be awarded every two weeks for the best and second best answers to each question. All the good answers will be published.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the *second* issue following the number in which each question is asked. For example, answers to question Number 6 published in the present issue, will be printed in the October 17 issue. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York."

Question No. 5. Suggest means for improving the typical control system.

Question No. 6. What is the best way to remove and replace piston rings?

FRANK

MERRITT

FLYWHEEL AND ITS FUNCTIONS.

AFTER scrupulous consideration of the replies submitted, the first prize for the answer to Question No. 4—What is a flywheel and what are its functions?—was awarded to Lester E. Milkey, of Sandusky, Ohio, and the second prize was awarded to A. F. Clement, of 204 East Franklin street, Mansfield, La. Milkey's answer is given herewith:

"In the ordinary motorcycle engine there are three idle strokes of the piston for each power or explosion stroke. The respective operations of these three so-called idle strokes are: drawing fresh charge into cylinder; highly compressing this charge, and ejecting the burnt gases after the explosion. It is only natural that some energy must be expended to perform these operations and carry the piston from one power-stroke to the next. This energy is supplied by the fast-revolving flywheel, which is nothing more than a disc or wheel made from iron or steel and securely fastened to or forming part of the crankshaft itself. This flywheel, when the engine is in operation, absorbs part of the force of the explosion and gives it out again as useful energy during the idle strokes. In addition to this the momentum of the flywheel, while turning at a high rate of speed, prevents any sudden increase or decrease in the speed of the engine, thereby making for smooth and steady running of the latter."

Clement's answer was as follows:

"The flywheel is a flat circular piece of cast-iron, having overhanging rims, the weight being chiefly in the rims, giving better balance.

A hole through the center receives one end of the crankshaft.

"In the four-cycle or four-stroke gas engine, there being only one power stroke in the four cycles or every two revolutions of the flywheel, it (the flywheel) serves to counteract the highly varying and intermittent driving force and transforms it into one nearer constant, storing up energy sufficient to carry the rotation through the three idle strokes of exhaust, supply and compression, giving practically uniform speed during the period between impulses, or power strokes."

HONORABLE MENTION.

Honorable mention is due the answer of Wesley G. Paulson, of Pittsburgh, Pa., which explains the action more technically than the average novice can comprehend, owing to the latter's lack of knowledge of physics:

"The action of a fly-wheel is based on the well known mechanical law of inertia—i. e., the tendency of a body to remain in its existing state of motion or repose. The motorcycle flywheel is a mass of metal, set in revolution by the engine on the explosion stroke. Inertia causes the flywheel to continue to revolve after the impetus of the power stroke has subsided, thus furnishing power for carrying out the exhaust, inspiration and compression strokes of the cycle, after which the explosion stroke stores up additional energy in the flywheel, enabling it to continue the cycle of operations indefinitely.

"The amount of energy which the flywheel

may absorb is dependent upon the speed, and the weight, and location of the weight with respect to the center of rotation. A small wheel running at high speed may have as much energy as a large wheel running at slow speed, but the larger wheel would be less responsive to fluctuations of speed and load. To secure smooth and uniform operation of the engine, it is therefore desirable to have heavy flywheels—as heavy as may be consistent with the speed, and strength of the engine parts."

The answer of C. Fluege, of Bronx, New York City, is very good, also, and is reproduced herewith:

"Any four-stroke motor receives but one impulse or explosion to every two revolutions of the flywheel or but one per every four strokes of the piston. In order to carry the piston past the three non-power strokes a heavy flywheel must be used, as it has not only to bring the piston back to the explosion stroke, but must also have momentum enough to oppose the resistance offered to the exhaustion of the burned gases (first upward stroke); the suction of a fresh charge (downward stroke), and finally, the compression of the charge (second upward stroke). These functions must be performed without any noticeable slack of speed of the motor.

"On single and twin motors the flywheels are bored to balance the speed of the motor, but on a four-cylinder motor the flywheel serves to counteract speed fluctuations only. The greater part of the weight of the flywheel is in the rim."

EUROPEAN MACHINES.

RALPH H. REGAN.—Following are the addresses of the leading European makers: **England—Clyno**—The Clyno Engineering Co., Pelham street, Wolverhampton; **Bat**—The Bat Motor Manufacturing Co., Penge, London, S. E.; **Triumph**—Triumph Cycle Co., Ltd., Coventry; **James**—James Cycle Co., Ltd., Birmingham; **Douglas**—Douglas Bros., Kingswood, Bristol; **Rover**—The Rover Co., Ltd., Coventry; **Rudge**—Rudge-Whitworth, Ltd., Coventry; **Singer**—Singer & Co., Ltd., Coventry; **Matchless**—H. Collier & Sons, Ltd., Burrage Grove, Plumstead, London; **Zenith**—Zenith Motors, Ltd., Weybridge; **Germany**—N. S. U.—Neckarsulmer, Fahrradwerke, Neckarsulm; * **Wanderer**—Wanderer Fahrradwerke, Reichnbrand, Sachsen; **Phanomen**—Phanomen Fahrradwerke, Gustav Hiller, Zittau; **Progress**—Progress Motoren und Apparatenbau Gesellschaft, Charlottenberg; **France—Peugeot**—Les fils de Peugeot freres, Valentigny (Doubs); **Griffon**—Griffon, 40 rue Louis-Blanc, Courbevoie (Seine); **Demeester**—Demeester, 22 avenue de la Grande Armee, Paris; **Austria—Puch**—Styria Fahrradwerke, Joh. Puch und Co., Graz, Styria; **L-K**—Laurin und Kelement, Slavia Fahrradwerke, Jungbunzlau, Bohemia; **Switzerland—Motosacohe**—H. & A. Dufaux et Cie, Geneve.

*Has agency: Sun Motor & Supply Co., 307 Amsterdam avenue, New York.

NEW YORK REGULATIONS.

CHARLES W. SMITH.—The speed limit on all streets in Greater New York is defined by a corporation ordinance of the City of New York, which states a maximum speed of eight miles per hour for other than the recognized motor vehicles of the New York State law. The latter does not include the motorcycle under the head of motor vehicles, hence as regards speed, the same limits as are imposed on horse-vehicles, bicycles, and the like, are imposed on the motorcycle. A breach of the corporation ordinance, as when running eight and one-eighth miles per hour, is punishable only by a fine whose maximum is \$10, but whose amount is impossible at the will of the magistrate before whom the offender or al-

leged offender appears. The distinction is not made between first and subsequent offenses, unless by the magistrate in imposing the full amount in the latter cases. In the case of the rider being halted and summoned, on his appearance in court and following a plea of "not guilty," the statement of the police officer is taken in preference to that of the rider, there being no witnesses. Most of the police mounts are fitted with speedometers or odometers, by means of which a conviction is sure; with others, rough estimates of the time taken in pursuit in covering a given number of blocks will generally convict, as the rider generally travels more than the legal limit. The fine is all that the offender is liable to, unless some other breach of the law has been committed in addition (as reckless riding, etc.)

Now as to custom. Most motorcycle policemen will not make arrests, at least in Manhattan, for speeds up to sixteen miles per hour, unless in crowded traffic. It is, however, never safe to exceed ten miles in any of the Boroughs as there are severe as well as lenient officers on post. It would be well to be warned against a plea as to the officer's incorrect estimate of the speed, as such a plea is almost always followed by a good fine. Thus, if A is summoned for riding at sixteen miles per hour, and pleads that the estimate was wrong and that he was doing twelve at the time, he, A, is liable to a fine for exceeding the eight miles per hour maximum in the ordinance. The admission of A that he exceeded the speed limit is not considered as quashing the case on the grounds of misstatement by the officer.

With recognition of the motorcycle as a motor vehicle, the maximum speed would be ten miles per hour in New York county, but under the Motor Vehicle law the motorcycle would be liable to a tax, the rider to taking out a license, carrying an identification number, etc., as is the case in other States. Changes in the New York City Ordinance have been proposed recently, but the above is legal at the present time. We will make public in our columns any and all such changes as they are adopted.

REASON FOR SLOWER RUNNING.

S. M'ALPINE.—You can run the motor slower on battery ignition for the following reason: The vibrator blade in the contact-maker will vibrate even when the cam

takes one second of time to "wipe" it and the vibrations making and breaking the primary circuit in the coil will induce a high-tension current in the secondary winding and sparks will occur at the plug points. Provided the motor will run very slowly the only limit as regards the ignition is the ability of the cam to vibrate the blade to produce sufficient sparks to ignite the mixture in the combustion chamber. With a high-tension magneto, the break is positive at all times and the electric discharge between the plug points is an arc, but below 60 revolutions of the armature per minute a magneto will not generate sufficient current, if any at all. This is with a setting for slow running and hill-climbing. We have seen single cylinder motors ticking round at 100 revolutions per minute on battery ignition, with no load on of course, but doubt very much if such a speed could be obtained with either high or low-tension magneto for jump-spark ignition under similar conditions.

FOUR FLANDERS BOOSTERS.

HERE'S a line of four big healthy fellows of the type which Walter E. Flanders has in his splendid organization. The boys,



from left to right, are L. J. Blundin, Eugene Miller, P. C. Bowen and B. C. Bradford. The photo was snapped at Columbus, Ohio, recently, when the boys were called in for a confab with the district manager concerning the 1913 models of the Flanders line.

BRONZED CYLINDER.

HARRY OWEN.—The bronze color on your cylinder shows that it has been overheated by driving for considerable periods at high speed. You have literally "tempered" it, using the oil as a medium when you pumped it in in excess during the event you mention. Unless the color is very deep, it may not permanently injure the cylinder casting, but you will probably have to get a new cylinder much sooner than if the overheating had not occurred. Gray iron will stand a surprising amount of excessive temperature changes, but is liable to give out suddenly, the cylinder cracking across the chamber or head as a rule. We do not advocate the use of a touring motor for racing, except by the advice of the makers of the motor. A special racing motorcycle will cost between \$400 and \$500, according to the power, etc. Write any leading manufacturer for details.

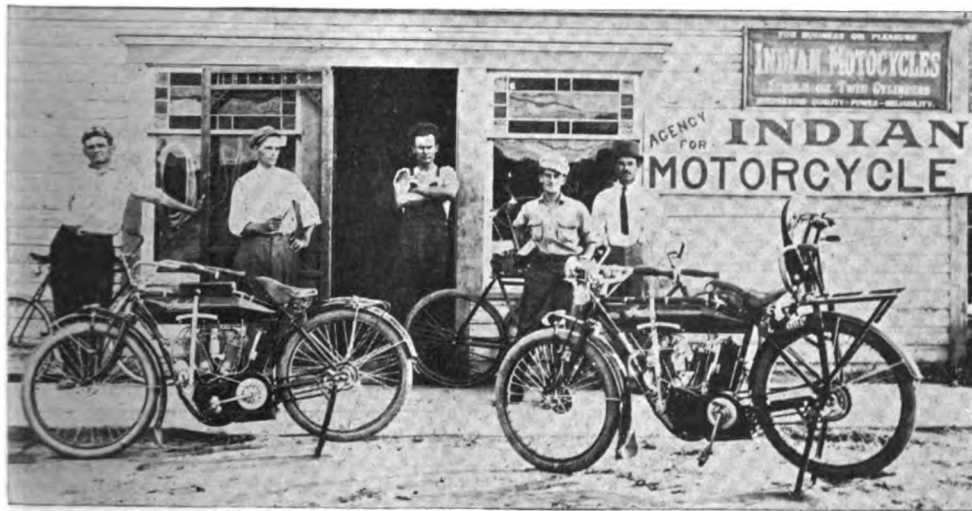
NORTHERN OHIO AGENT.

C. L. SCRIVENS has accepted the agency for the Triumph in 45 counties in northern Ohio. His headquarters will be in Cleveland, where he expects to open a wholesale and retail distributing house.

A PROPOSED ordinance providing for a license of \$5 on all machines operated in the city is meeting with strenuous opposition from the New Orleans Motorcycle Club

A GARDEN CITY SHOP.

EGGERS & SYLVESTER are proprietors of the Garden City (Kan.) motorcycle headquarters shown in the photograph. Syl-



vester stands at the left; Allen, a local rider, next, and Eggers in the doorway. The machine at the right had just completed the Short Grass tour when the photograph was taken.



Tips and Topics.



AFTER the Tourist Trophy races in July quite a number of inquiries about three-speed hub-gears came to me, accompanied almost always by the question, would I recommend them? And my answer has been that I wouldn't; and these are the reasons. In the first place, the only thing that insulates the gear device from road shocks is the rear tire. Compressed air and rubber and fabric are quite flexible and jolt-absorbing, but they haven't yet been able to preserve a planetary gear from having the pinions put out of line, for any length of time. These hub-gears are planetary type and their efficiency depends on the exact meshing of the various pinions and spur gears, or wear will be great and the noise greater. If any of you remember the little curved-dash runabouts of 1901-2 vintage running on the low speed, you will have an idea on a large scale of the "sweet song of the gears" when worn or not in line; and these three-speed devices use the indirect drive on the high and low speeds, with direct drive on the middle speed. So that for ordinary running on level roads you drive through gears, and climb hills on the direct and on the low (gear) speeds. To get these three speeds means at least seven gear-wheels, and while for a 4 h. mount these would be small and not of much weight, the whole outfit for a 7 h. twin might scale 25 pounds, which is a nice little extra load to put on a rear tire.

How One Machine Acted.

Apart from acting as a further destroyer of tires, the rider who uses such a gear should be given a medal for gymnastics, or for sang froid at least when the pavements are greasy. Mr. Three-Speed Gear snugly fitted in place of the coaster-brake has aspirations toward getting ahead, and as his weight acts like the head of a sledge swung by its handle, the machine and rider often indulge in the "Ostrich Wiggle" on short notice. I remember my first sight of this performance; it was back in 1905 in New York and the late Calbraith Rodgers, who crossed the continent last year by aeroplane, was the star performer. He had a long, low motorcycle, with what was then a huge $5\frac{1}{2}$ h. twin motor and a Roc two-speed gear in the rear hub. This Roc gear had a number of pedals which engaged the two gear positions from the foot rests, and he started the outfit with a crank on the rear axle. Rodgers used to crank steadily until the motor barked, then

yank off the starting crank, leap at the saddle and depart. When successfully done, as his feet struck the rests he executed a sort of clog-dance on three pedals, there was a gritting noise and the machine went forward with a bound. This was engaging the high gear, he told us. After riding on the asphalt for a while, he struck a patch where the watering cart had been and the "Wiggle" commenced. In spite of another hoe-down on the pedals, Rodgers' machine made two revolutions, and he continued on at an angle, diving into the back of a cyclist and coming down uninjured. I got to the machine and twiddled everything on the handlebars, finally stopping the motor. Rodgers explained when he got up that this was the usual thing with the gear-in-the-hub and that he was learning to fly. We noticed that the next machine he bought did not have a hub change-speed gear. Since then I have not been much in favor of this location for the gear, and more recent happenings of a like nature have only strengthened my dislike. "Britisher," in his interesting notes in *MOTORCYCLE ILLUSTRATED* has mentioned similar experiences.

An Inconvenient Location.

Then there is another thing—getting out the rear wheel. It takes the English rider one hour and a half to replace a tire with a hub-gear fitted; there are a number of rods and bell-cranks to disconnect and connect up during the process. With a powerful twin, again, there is no need of three speeds, two—a low and a direct high—are all that are needed. So I do not think that the three-speed gear in the hub will ever become popular, and I stick to my original statement that I don't recommend it. The gear device ought to be located on the bottom bracket or countershaft, if anywhere.

I spoke of the coaster-brake a little while back. There really ought to be three arms per rider when some of them are to be fixed. Most riders do not carry a vise with them and I have several times assisted in fixing a nut on with one hand while compressing a spring with the other, and all this while the rider was fitting on the braking member. How a single, two-armed man could perform these operations all at once is a mystery. We shall see whether any rider can suggest a remedy for this, in the near future.

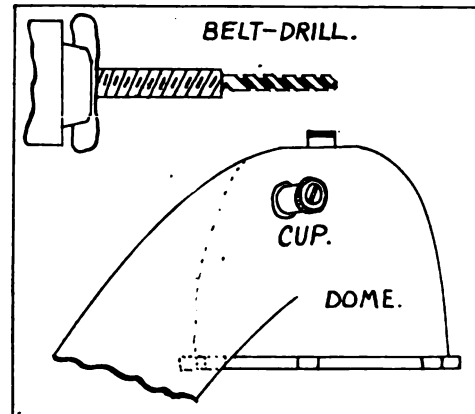
I have been accused of being unpatriotic a number of times because I did not see the beauties of certain devices fitted to American machines. I still do not see why you should have to push on the rocker which lifts the exhaust valves, instead of pulling on it. To push isn't any easier than to pull; in fact it is harder, and yet, you find lots of machines where the lifting motion is a pushing one. If the rocker arm

is turned over 180 degs. anyone can convert the motion to a pulling one and use a spring, if necessary to bring the rocker backward and drop the valves. And the lifter is connected up to the grip where the leverage is small, making the work of lifting fairly hard.

I guess that the edge of my axe is pretty dull now, but it is pretty hard not to try to make things easier for the motorcyclist, even if it's only a matter of reducing the motions of his hands. When you are not built in the shape of a wedge with small hams on the business ends of your arms, little refinements in control, steering, etc., appeal strongly to you.

A Handy Drill Wrinkle.

You can't feaze a first-class motorcyclist, as a rule. A short time ago one rider wanted to fit an auxiliary air-valve to his single cylinder motor, but found only a taper-tap at hand. The valve dome luckily was of soft brass and a belt drill was borrowed, it being nearly the right size for



the thread of the little revolving-cover grease-cup used for the air-valve. The drill had a T-handle; this was fitted into the jaws of an ordinary bit-brace and the hole bored. A nail-file enlarged the hole until the tap could bite, when the thread was cut and the "valve" screwed in. The position of the valve in the dome was such that it could be used for priming also, dropping the gasoline on top of the automatic inlet valve.

Speaking of Antecedents.

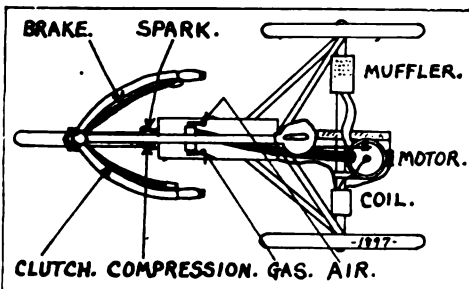
Our big brothers, at least that is what they are pleased to call themselves, the automobilists, in some parts of the country are getting over their patronizing way of looking down on riders of the two-wheeler. Some of them are dickering now for interest in the manufacture of the single-tracker; but the drivers are getting to be more tolerant in their attitude to those who ride the roads than before. This in part is due to the growing use of the motorcycle

by drivers of automobiles, and in several cases around the large eastern cities, automobilists riding two-wheelers have found out what treatment many drivers give the rider and have acted accordingly. Outside of the justice of the thing, those who enjoy both sports should fraternize, for the machines have a common origin; the first automobile was a motorcycle.

Gottlieb Daimler, the grandpa of the motor-vehicle, in 1885 built a four-cycle air-cooled motor which he mounted in the frame of a wooden bicycle vertically. On a crankshaft he fitted a pulley with a round groove and drove the rear wheel by a round belt. An idler was provided, giving free engine by lowering it, and the rider had foot-rests where the pedals now are. The ignition was by hot tube; 1895 saw the jump-spark first used by de Dion on a high-speed air-cooled motor. So you see that we riders are actually older in service than those who drive on four wheels.

What We Had in 1897.

This shows that the free engine device and foot-rests are not novelties and for that matter neither is the decompressor. In 1897 the real "racy" motorcycle was a tri-cycle with a live rear axle and an air-cooled motor back of the axle driving it by spur gears. I had one, with a sprightly (occasionally) little $1\frac{1}{4}$ h. motor, a cone clutch



and a small band brake on the differential. The starting of that 460-pound machine may be of interest, pointing out how easy it is nowadays. You first closed off the air by means of the little lever on the right side of the top tube, then you opened the gas valve (throttle) by a similar lever on the left side. Next the switch plug was put in the side of the battery-case, the spark retarded by a third little lever, and finally the compression was partly relieved by turning a fourth little lever. Then you pedalled violently, driving the outfit along with the clutch in, if it would stay that way. If all the settings were correct the motor would fire after 150 or 160 yards pedalling and you quickly; 1—closed the compression valve, 2—gave more air; 3—gave less gas; 4—advanced the spark. On reaching a hill you operated the air-gas and spark levers to suit, or you pedalled or pushed up that hill. If the hill was steep you helped the motor with the pedals. When the clutch took hold it bit hard, but the brake, operated by a hand-lever, always worked. The frame was rigid and the speed often 19 miles an hour. They fitted big $1\frac{1}{2}$ inch pneumatics, too. It was cheerful riding all around. When I hear a rider nowadays holler about his being a hard-starting machine I wonder how far he would have gotten with the de Dion "speedster."

So much for the past. Before 1914 we ought to see bigger improvements made than between 1897 and 1912.

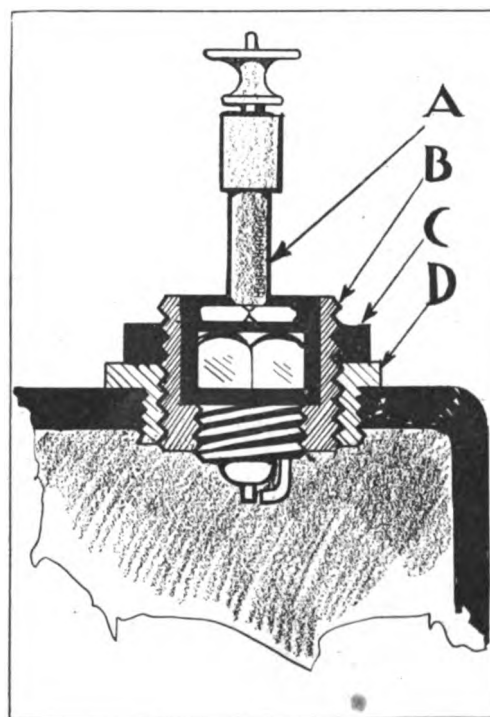
VARYING SPARK PLUG SETTINGS

How Ingenious Device For Changing Position of Spark Points in Combustion Chamber Will Assist the Motor

A GREAT deal of difference in the performance of a motor will be noticed when different spark plugs are applied. Some plugs take up more space than others and so slightly increase the compression; others have the points projecting further into the combustion space than those usually fitted. These may cause a more rapid spread of the ignited gases, and sharper and more sudden ignition of the whole, making the motor livelier. Others, again, form pockets, which retain some of the burnt gases which are again compressed around the plug point, resulting in a less rich mixture just around that part. This is bad, because it is here, just around the plug points, that the very best mixture is wanted to fire immediately on the spark passing.

Often considerable differences in efficiencies can be got by a little experiment with different plugs. Some plugs are made with a big, long space up the inside, isolating the plug centre from the outside. The object of the makers is to preclude short circuiting by carbonizing and sooting up. These plugs are an advantage to motorcycle users who are too lazy to clean their plugs. It is possible, however, that by retaining around the plug centre some of the burnt gases they prevent rapid ignition, which is important if full power is to be obtained from the combustible charge.

If plugs are kept in proper order the best position for the points is just inside the combustion space, not in a pocket, and with as clean and flush a surface as possible so as to help get all the exhaust scavenged out away from the vicinity of the sparking points. A little experiment is, however, an advantage, as there are so many factors which affect the results, and different engines and different plugs all call for different treatment, but seldom get it. If really valuable data be required, nothing is better, when first commencing the tuning up of the motor, than an adjustable plug socket, by means of which plugs can be tried at different positions and different plugs accommodated.



This socket is unfortunately only applicable to side-by-side valve motors, as other types rarely allow of sufficient boss-surface in the heads or valve-chamber walls to admit of boring and tapping to larger diameters.

The method of arranging this is shown in the illustration. D is the valve-chamber cover, tapped out inside to take the threaded sleeve B, which in turn is threaded inside to take the sparking plug and recessed to accommodate the shoulder of the threaded part and the square. The plug will, of course, have to be operated by means of a box spanner. The inside of B is squared, or a couple of slots are cut down its side so that it can be turned with a bar spanner or key. By this means it can be raised or lowered in the cap D carrying the spark plug with it, and different heights of plug spark points can be obtained relatively to the combustion chamber head and the valve pocket.

In order to lock it securely in the desired position there is a case-hardened or tempered lock ring C, which is turned perfectly flat on the underside to fit in the top of the valve-chamber cover D and screwed a good fit around B.

In this way there is possible a very simple and convenient means of making adjustments to the motor which will allow experiments within certain limits, in the direction of reducing or slightly increasing the compression, and also in the way of pocketing the plug points or adjusting them otherwise relatively to the combustion space or the valve-chamber. When a machine is used sometimes for solo work and sometimes for passenger work, it may be found convenient to have a pair of sleeves B adjusted exactly to the two requirements.

WICKSTRUM WILL FIGHT.

P. W. WICKSTRUM, who was recently arrested by the Lincoln (Neb.) police for infringement of an ordinance prohibiting carrying a passenger on a motorcycle, and who was fined and sentenced to jail until the fine was paid, has begun habeas corpus proceedings to test the validity of the law.

A COLUMBUS ORDINANCE.

COLUMBUS, O.—An ordinance has been introduced in the local city council to regulate the use of motorcycles on the city streets. Excessive speed is prohibited, and all machines must be brought to a stop when signalled by anyone using a horse-drawn vehicle. Carrying children under seven years of age is also tabooed.

PIANO TUNER SAVES TIME.

L. E. WOODRUFF, a piano tuner of Coffeyville, Kan., whose territory comprises three counties, and who has heretofore made his trips in an automobile, has purchased a motorcycle and will henceforth use it to travel over his trade territory.

WORK will soon be started on a \$75,000 motordrome to be erected in Cincinnati, Ohio.

Paul McGrath, of Freeport, Ill., recently completed a motorcycle trip of 1,465 miles.

C. R. Calkins, milk inspector of Tacoma, Washington, uses a motorcycle in making his daily rounds.

A YANKEE ON EUROPEAN ROADS

MAXIMILLIAN ST. GEORGE

PERHAPS it would be well to state in the beginning that this article and those to follow are written by one who had ridden a motorcycle only one week before undertaking the trip which he will describe. In all he had covered only about 150 miles. The aim of these articles will be to show any one wishing to tour Europe the easiest and most economical way in which to travel by motorcycle. They will also deal with road conditions, customs regulations, and, naturally, with motorcycle troubles.

After crating my machine in Chicago I had the American Express Co. ship it to the White Star Line dock in Boston, Mass. On my arrival in Boston the day before sailing I called at the dock and found that some one, most likely the driver, had ordered the machine held for charges. At my request one of the White Star Line employees called up the American Express Co., and was informed that everything was all right. The next morning, two hours before sailing, I asked to have my machine put aboard, but the baggagemaster refused. I could not show him any receipts,

as the Edwards-Crist Co. had shipped it from Chicago, and I had no opportunity to get the papers from them. Not being able to induce him to change his mind, I called upon the Express Co. and had things straightened out. I reached the ship just as the gang-plank was being taken ashore.

The Arrival in Liverpool.

As I had shipped my machine as excess baggage it was put ashore on our landing. Another passenger who had shipped his as freight was not only obliged to go to the freight offices of the White Star Line, but also had to wait until the next day and go to the South Canada Docks, where he discovered that all his tools and a motorcycling coat had been stolen. The charge for shipping as excess baggage or freight was the same, \$5.25.

Immediately upon landing I had my machine carted to a garage, and was told that this service would cost 24 cents, but when presented the bill included the 24 cents cartage, 84 cents dock clearing charges and 24 cents commission. It is advisable to send the machine to some garage, such as C. W. Donkin & Co., Webster and Dale streets, or some good motorcycle shop, and there put it together, leaving the crate in storage. Storage charges on a crate are 24 cents per month. To ride in England a license is required, so as soon as my machine was assembled I went to the office and paid \$2.52 for a driving license and registration. From there I went to the Automobile Association and Motor Union Club at 134 Castle street, where I joined the club, paying \$3.24 dues. Here I made application for an international pass and passes for Belgium, France and Holland. I was also advised to take out triptyques for Germany and Austria, as these two countries do not recognize the international pass. The charge for the two would be \$3.15 and I would have to deposit the customs duties with the club. These duties would be returned to me upon the return of the third sheet of the triptyque. I did not take these triptyques, because I wanted to see if the international pass and membership in the Automobile Association were sufficient, and besides I did not care to spend that amount of money and leave a large deposit for customs at the same time. It generally requires a week's time to get all the necessary papers, but through special attention I did not have so long a wait.

Motor Trouble Aplenty.

With a rider named Owen, whom I had met on the steamer, I left the city after dinner, and it was indeed fortunate for me that I was not alone. If it had not been for Owen I do not see how I could have reached Chester. My first trouble developed in Liverpool, when for some reason my machine would not move. We looked it over and Owen found that my gasoline was not turned on! Next my clutch kept slipping, and when this was adjusted I found that my spark plugs were all coated

and that the engine was feeding too much oil. We finally reached Chester, about 4 in the afternoon. On stopping to inquire our way into the city my engine died. My cup of trouble was certainly full, and had I been alone I might have been tempted to take the first boat back to America.

This time we went over the machine thoroughly. We inspected the gas tank, the spark plug, the chain and tested the spark plugs and the magneto, but all to no avail. Then Owen disconnected the magneto cut-out and the engine pulled at once. We then rode over beautiful roads, amid charming scenery at a 30 mile an hour clip, slowing down only in the small villages, till we came to Blynhurst, near Stafford, Owen's home. I received a hearty welcome from Owen's father, and have changed my mind as regards certain English characteristics. I have always been of the opinion that the Britisher is cold and inhospitable, but that is to strangers only.

A Narrow Escape.

Owen and his brother accompanied me on my way to Stafford and Grantham. Just out-



The Cologne Cathedral.



Famous Cascade in Dresden.

side of Stafford we almost collided with a motorcyclist who was going at the rate of 40 miles an hour around a bend, and on the wrong side of the road. We had a close call. Nothing could be better than the English roads. I like to tear along at 40 and more miles an hour myself, but one can not be too careful in making the turns. The roads are well posted with danger signs, there being one at every cross-road, turn, descent and rail-road crossing and before every school. The speed laws are strict, and I was told that the police take pleasure in arresting anyone who breaks them. However, I hardly ever traveled less than 35 miles and was not stopped.

All along the road I met the uniformed agents of the Automobile Association, who, upon seeing my membership badge on the handlebars of my machine, always saluted. These agents or guards are on all the main English roads. They warn you of police traps, tell you whether or not the road is open, give you directions and in case of need ride to the nearest village for help. They are employed and paid by the association. On this run to Grantham I passed through five rain storms.

A Tandem Riding Exhibition.

I gave the Grantham folks a treat, by way of demonstrating the American style of double passenger riding. The English use side-cars with very few exceptions, and it is a surprise to an American to see how a lightly-built, 2½ or a 3 h. p. machine can travel over the roads and up hills, carrying a side-car. My baggage-carrier is a combination tandem and luggage affair, made by the Atlas Co., of Chicago. My bags were merely taken off and my friend took her seat on the carrier and we were off at a 30 mile an hour clip, much to the astonishment of the town folks.

I left Grantham at 10 in the morning and arrived in London at 5 in the afternoon, passing through Stamford, Eaton Socon and Barnet.

A Stop-over in London.

In London Mr. Spiegel, of the Essenkay Co., whose preparation to prevent punctures I have in my tires, entertained me. I stopped for the night at the Bruce Lodging House, on Drury lane, which is conducted by London County Council. Beds in partitions, called cubicles, cost 14 cents; better beds in larger cubicles, with washstand, soap and water and a towel may be had for 24 cents. One may lodge by the week for \$1.20. A good meal may be obtained for 15 cents.

At the Automobile Association and Motor Union in London I received my international traveling pass (certificate international de route); also a customs ticket for Holland and one for France, Belgium, Switzerland and Italy; a certificate of driver's competence and one for the fitness of the machine.

Advantages of the Association.

The international pass is a booklet of 40 pages and contains passes for all the countries you are apt to traverse. The advantage of joining the association and obtaining the passes is obvious.

The association endeavors to furnish the motorist with all the information he is likely to need. It gives full particulars in regard to the different customs and formalities. It gives a list of the hotels, repair shops, transport rates, insurance rates, itineraries of the chief routes, a list of road maps, road books and a great deal of general information. It also



Top picture shows a scene in one of Dresden's beautiful parks; Lower—The Brandenburger Gate at entrance to Berlin.



gives a handbook, compiled from practical experience, which contains a concise and complete resume of everything the tourist may need to know. The holder of a pass does not have to take out a license in the various countries, nor does he have to get number plates, as the one received in England is sufficient.

Convenience of Triptyques.

The chief benefit of having triptyques is that you leave your customs deposit with the association and not with the officials at the frontiers. The triptyque is a threefold sheet, of which the first portion is kept by the customs on entry and the second on final exit, while

the third is sent back to the association, on receipt of which they mail you a check for the amount deposited. The charge for the first triptyque on a motorcycle is \$2.55, and 60 cents is charged for each additional one. In Germany the duty on my machine would be \$8.48 and in Austria \$14.60, so I decided to pay the deposit as I entered these countries.

Having received all my papers I started for Dover, by way of Maidstone and Folkestone. The road passes Westminster Bridge to the Elephant and Castle, and down the New Kent road. Then the Old Kent road follows the train lines along New Cross road and through Eltham to Sidcup.

(To be continued.)

From ^{OREGON} Portland to ^{MAINE} Portland

by JOSEPH P. SHANTIN



ONE fine day last spring, A. J. Neisz, a very good friend of mine, spoke of taking a trip around the country to see some of the states outside of Oregon, and when I met him a few days later I told him I was on for taking a trip to New York and return. He readily agreed to this proposition and we prepared to bid farewell to Portland, our home city.

The next few days were spent in planning the route, and getting together the necessary equipment. I purchased a new 7 h. Flying Merkel, and Neisz had a 6 h. Harley-Davidson without free engine, which he felt would take him through. I had a small traveling bag made to carry only about twenty pounds of luggage, as I had found out on a previous trip to Mt. Hood how inconvenient it is to carry too much baggage.

Many friends said that I was foolish to attempt such a long trip on a single-track-er, as there would be too many hardships, and suggested that I travel by rail, if at all. However, I thought it would be a good outing and, knowing that the scenery would be much better by motorcycle than by rail, I decided to use my motor and to ship it ahead when the roads became too rough.

Start Made in Rain.

We left Portland during a heavy rain, consoling ourselves by thinking that a poor start might portend a good ending. We had good macadam roads for about sixteen miles; then we struck some sticky clay, which made it impossible to proceed. The mud clogged up under the mudguard and one could not ride even down hill without having to scrape the mud off every few feet. We came to the little town of New Era (18.5 miles) where we left our machines, but as we could not find meals or lodging there we walked ahead about half a mile to J. E. Bradtl's farm house. After hearing our story, Mr. Bradtl took us in for the night. It had rained ever since we left Portland and we were soaked to the skin by this time.

The next day brought clear weather but

the roads were still muddy. After going back for our machines we continued our trip as far as Gervias, a distance of 21 miles. Here we were the guests of Jacob Neisz, my companion's father. We stayed over for the rest of the afternoon and the following day, Decoration Day, waiting for the roads to dry a little. Then we left Gervias, headed for Eugene (95.3 miles), where we stayed at the University of Oregon overnight as the guests of my brother, George W. Schantin, who was attending college there. We encountered both good and bad roads and at one place we had to go off the main road on account of swollen streams.

Muddy Roads and Bad Hills.

On the evening of June 1, we found ourselves seven miles south of Roseburg, having traversed some good roads and also a very bad stretch of muddy road past Divide, where we had to walk for a stretch,



"We Left Portland in a Shower of Rain."

leading our mounts. That night we slept in a farm house. On Sunday, June 2, we made it to Gold Hill (85.6 miles). We had bad hills most of the way and an exceptionally bad one near Glendale. The stores being closed on Sunday we were unable to buy any gasoline and my supply ran out about four miles from Grant's Pass. I had to borrow some from my partner, and this lasted till we reached Grant's Pass, where we purchased some at a garage.

On June 3, we reached Hiltz, Cal. (47.9 miles). We had fine roads until we struck the Siskiyou Mountains, where we rode rough and steep hills for about seven miles. To make matters worse, my partner had the misfortune to break his handlebars at the foot of the mountains. He was about to go back to Ashland or Medford to try to get a new pair, but I persuaded him to wire the broken one together and have it fixed on the way. He was able to continue, but under difficulties. We had to ford several streams that day, which I did not enjoy, as in most cases the water would choke the engine and I would have to wade through.

We reached Kennett (123 miles) on June 14. The roads were mostly rough and hilly. We had to cross several creeks and took pictures of one. It was necessary to ride at night in order to reach Kennett, and this was dangerous, as I could not get my lamp to burn properly and the roads were hilly and winding. Neisz was considerably ahead of me when my light went out altogether, and my horn not being sufficiently loud to attract his attention, I had to fire a few shots from my revolver. This had the desired effect, and he came back at once, thinking something was wrong. We finally got the lamp burning and reached Kennett about 11 p. m.

The First Puncture.

On June 5 we had winding, hilly roads to Redding, where they improved, and from Red Bluffs they were good. My partner had the pleasure of getting his first puncture that day, and while I was waiting along

the road ahead of him a farmer came along with a load of hay and a team of mules. I was sitting on my machine, of which the mules seemed to take no notice until they got directly opposite me; then they took a sudden notion to make a detour around me, and upset the load of hay. It took the driver by surprise and he was peeved. He told me the best thing I could do was to move along, as his boss would make it hot for me if I stayed around. Neisz came along soon, and we continued our journey, not waiting for the boss to show up, although I think he would have been harmless. This was one of the hottest days of the entire trip. On June 6 we had very good roads to Lodi. We stopped over for three hours in Sacramento while my partner had his handlebars brazed.

On June 7 we reached San Francisco, having stopped at Stockton and Oakland on the way to visit friends. We had good roads all the way, except where we got off the main road for a short distance. I broke the bars under my saddle, the first breakage or trouble I had up to that time. We spent the next two days in San Francisco visiting friends, the main feature of our stay being a trip through the sugar refinery, where I saw more sugar than I ever expect to see again.

On June 10 we rode to Watsonville, having fine roads all the way.

More Puncture Trouble.

We reached San Luis Obispo on June 11. With a good start and good roads we expected to break our record that day, but it was my turn for hard luck, as I got a puncture. Neisz was ahead and we had only one pump, which he carried, so after repairing the puncture I sat down to wait until he would decide there was something wrong and come back. An auto came along in the meantime, and I borrowed a pump, and then was able to go on for a few miles until I had a blowout; my partner did not get away from me that time, and we soon had it fixed. Later I ran out of gasoline and could not borrow any from my partner, as his supply was very low. The nearest fuel station was



"A Mexican Section Hand Provided Tea."

eight miles distant, so Neisz went after gasoline while I waited. He had not gone more than a mile and a half when his supply was exhausted, but fortunately he stopped near a farm where they had an auto and was able to obtain enough gasoline to carry us both to the next town.

On June 12 we proceeded to Santa Barbara. We had good roads to Los Olivos, where they became rough and hilly. We both ran out of gasoline. Being unable to get any at several farm houses we had to walk two miles to a small store, where we got two bottles of it. The weather was very hot and walking was hard work.

My Partner Is Lost.

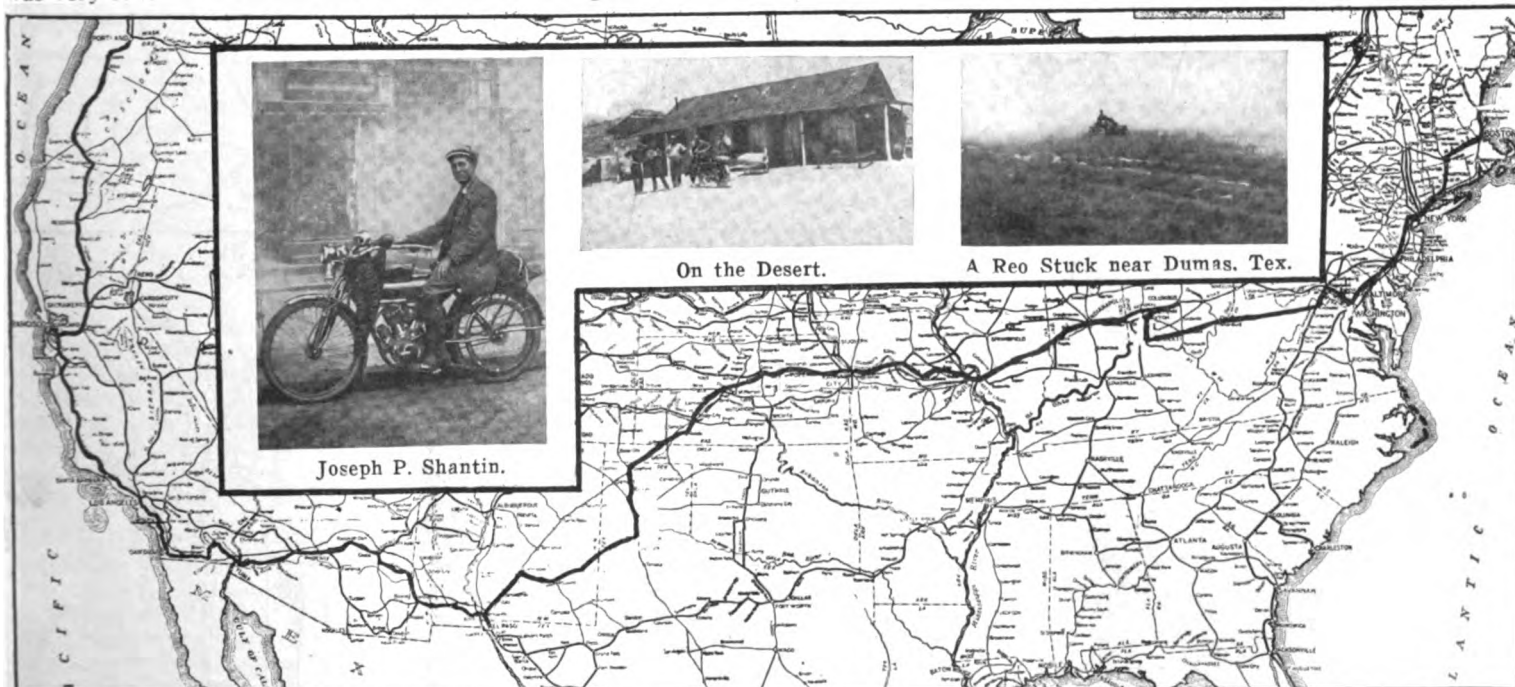
We reached Los Angeles on June 13. The roads varied, being partly good and partly rough. I lost Neisz about 25 miles north of Los Angeles by letting him ride past a little store, where I had been waiting for him. He was beating it along at a good rate, intending to overtake me, and I started out to

catch up with him. The roads branched, both leading to Los Angeles, and seeing a cloud of dust on the main road I followed it, but later found it was made by an auto. As it was hard to tell what my partner would do I decided not to go back to where the roads separated, but kept right on. I stopped at the first garage for gasoline and told them of losing Neisz, explaining that I thought I would be able to find him at the Harley-Davidson agency in Los Angeles. I left word at the agency that I would meet him at a certain time and continued on to Gardena to visit an old school-mate. Neisz happened to take the same road and stop at the same garage, and so learned of my plans, and I met him the next day.

We visited friends in Los Angeles on June 14 and 15, and also met Charles F. Gates, Pacific Coast F. A. M. referee. We spent the evening at Gardena with friends, and on June 15 we took a short ride to Pasadena. On June 17 we rode from Los Angeles to San Diego. We had a short interview with Mr. Gates, who took pictures of us before leaving San Diego accompanied by another motorcyclist. On June 18 we stayed over in San Diego visiting relatives, and the following day we left San Diego after investing in a canteen and extra gasoline cans. We had good roads until a short distance from Potrero, where they were bad on account of fresh grading. After that the roads for the most part were very bad, and it was hard to stay on the machine. We got into a grading camp that night and slept beside a stack of hay. It was quite cold, and we had to get the canvas cover doubled over us in order to get to sleep.

Through the Devil's Canyon.

On June 20 we rode from Dry Camp to Brawley. We got an early start, as the preceding days had been very hot, and it looked like another scorcher. The roads were poor, and we had to go through the Devil's Canyon (true to its name), which was several miles of big boulders and rocks. However, we had a little advantage, as it



Portland to Portland—Heavy Line Indicates Route Taken by Shantin Across the Country.

was downhill nearly all the way. Then we struck sand for the first time, and this stretch was bad. I took several spills and broke off a pedal, which made navigating rather difficult. I had considerable trouble in finding a place to repair the pedal in El Centro, but finally found an old bicycle pedal and had a blacksmith weld the tip on for me. We had fair roads from there to Brawley.

On June 21 we got an early start and made good headway for about 15 miles, when we struck sand. We had continued along in the sand for about three miles when my partner, having left his machine on the stand, informed me that he had seen enough and had decided to turn back. I was making fair headway, considering the conditions, so I decided to continue the trip alone, although somewhat afraid, owing to conditions of the country. We settled our accounts, I borrowed his camera for the rest of my trip and we parted about 9 a. m. that morning. I have heard since that he reached Portland safely after shipping his machine back. The sun came out very strong, and I made a little shelter out of a sage brush and kept beating the sun around it all day. In the evening I rode a few miles more, but could not light my lamp; the water had evaporated, and I did not care to take any from my canteen, as it was running low, so I slept out on the sand that night.

Long Run For a Pump.

The following morning I came upon the railroad tracks and followed them into Mammoth, a section station. I felt pretty sick, as I had not carried any grub with me and the heat seemed to have got the better of me. I felt a little better after drinking some tea obtained from one of the Mexican section hands, who also gave me a little breakfast. Traveling was rather rough now. I had let nearly all the air out of my tires when riding through the sand, and being without a pump since my partner had left, I had to beat it to the next station, about 13 miles distant, where I heard there was a garage. I borrowed a pump there from a Coast to Coast car that had been broken down. Then I had to lay around until late in the afternoon, when I had a chance to ride back. After pumping up my tires I continued on to Glamis, riding the railroad tracks, as they were much better than the sand.

On Sunday, June 23, I reached Yuma, and helped to load the Interstate automobile on to a flat car for shipment to Yuma. This car left Los Angeles before I did, but seemed to have had bad luck, breaking down twice. From late reports I understand they gave up the trip entirely. I cleaned my engine and tightened the belt before riding the tracks to Yuma.

Spills Break the Monotony.

Palomas was my destination on June 24. The Colorado River was very high at that time, backing up the Gila River, which covered the road in several places, so I rode the tracks to within a few miles of Dome, where the road was fair. I had some sand for a short distance and then fine roads to Castle Dome Mine, where I had dinner, and happened to meet A. E. Weeks, the motorcyclist who attempted to cross the desert a short time before. He was unsuccessful, having been almost exhausted when

picked up by the *Times* car, of Los Angeles. His failure was due to his machine having broken down with no water on hand.

A Narrow Escape.

On June 25 I rode to Phoenix. As it was very hot, I had started early, but took the wrong road for five miles, when things looked doubtful, so I turned back, which was one of the luckiest things I ever did, for the road led to a mine 60 miles distant with no water along the entire route, and I had a very scant supply of gasoline. The fellows at Palomas were very glad to hear the chug of my motor returning, as they had yelled their heads off when I left, trying to get me to take the right road. I did not hear them on account of the noise of the motor. I had expected to get gasoline at Palomas, but they would not sell less than a five-gallon can, so I took a chance with my scant supply and got what I needed at Agau Caliente. I had a few stretches of good road, but most of it was rough and sandy. I met a man along the road who asked me to mail some letters for him. One was addressed to a person in St. Louis, Mo., so I asked him if he would like me to deliver it in person, as I was to go through St. Louis. He agreed, but as there was no telling if I would ever get that far, I mailed them at Phoenix. A few miles farther down the road I met another party with a shy team which did not like the looks of my machine, so I had to stop. In talking with

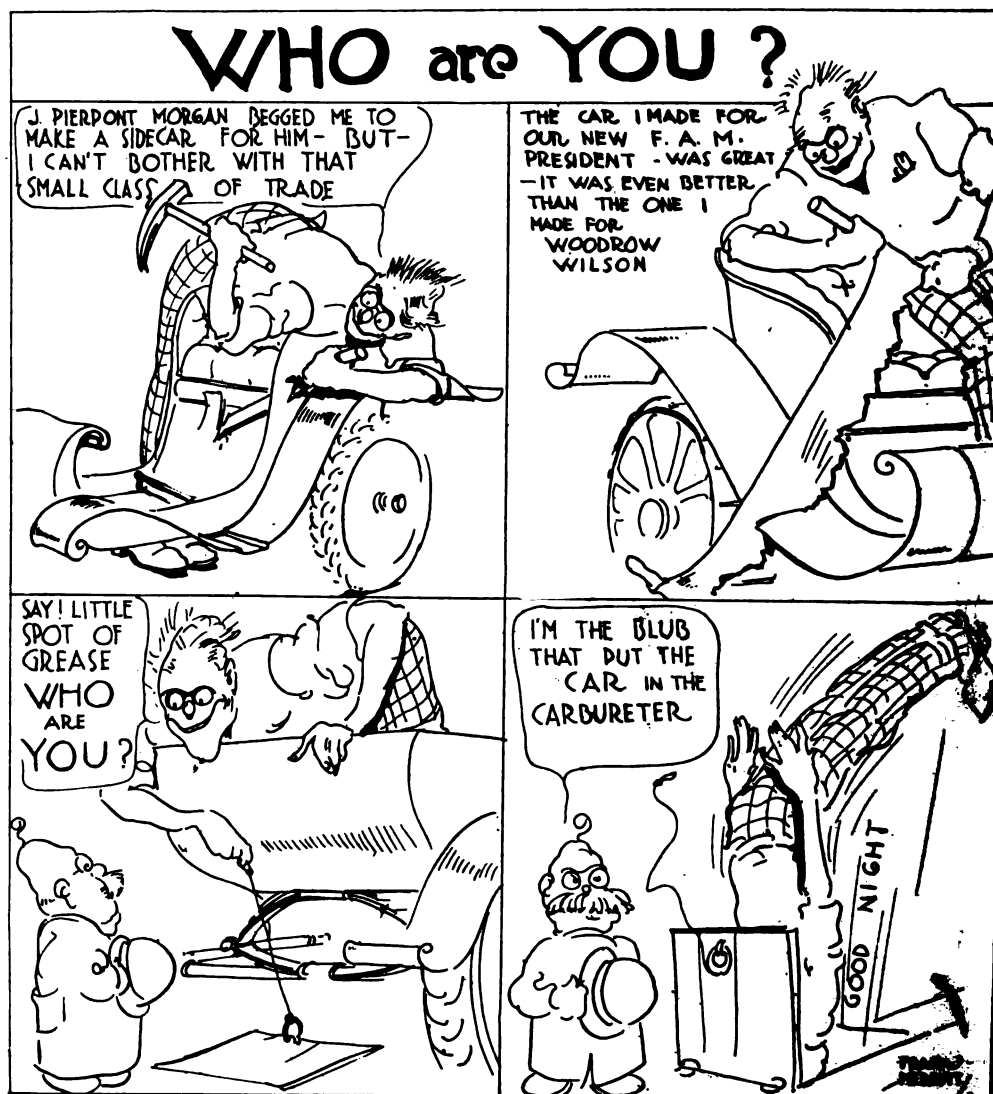
the driver, A. G. Dyer, I found that one of the letters I had was addressed to his father, so he requested me to call on him, and I did. On arriving at Phoenix I looked up the Merkel agency and received good treatment at the hands of Mr. G. Sadler.

Friendly Camping Party.

I rode from Phoenix to a point 13 miles east of Roosevelt on June 26. I had my front wheel straightened and cleaned the machine before leaving Phoenix at 1 p. m. I passed the big Roosevelt dam and had good roads all the way. I met H. P. Deamund and a party of campers along the road, who invited me to a little supper, as it was just ready. I accepted.

The next morning, June 27, after breakfasting with the campers, I started out early and had good roads most of the way. I passed through the San Carlos Indian Reservation. At one place I passed a Mitchell car which had broken down in the sand. I struck a few miles of muddy road where a thunder shower had passed a few hours before and had difficult traveling, taking several spills. I had to cross the Gila River twice, and in doing so the second time I stopped to wash off the machine, forgetting all about the magneto, and when I got across I could not get the machine started. After trying a while I left the machine there and crossed back to a farm house for the night.

(To be continued in the next issue.)



EMERGENCY CYCLE SQUAD.

SAMUEL S. TOBACK, general manager of the A. Elliott Barney Company, has just created an "emergency squadron" and added it to the service department of the company, to give instant service by means of "minute men" to Hudson owners throughout the company's territory. The "emergency squadron" is now a permanent fixture in the department, which renders service to Hudson owners. It consists of a corps of men thoroughly versed in the mechanism of Hudson cars.

These men will travel along the main roads of the territory on motorcycles equipped with the tools necessary to make adjustments for Hudson owners, and will at regular periods "call up headquarters" to learn if their services are necessary. In addition to those who patrol the main roads will be the men who answer telephone calls at the office.

The "emergency squadron" will make adjustments on all Hudson cars; will make inspections on the road when Hudson owners are encountered and will leave no stone unturned to keep every Hudson car which any member of the "squadron" meets in good running order at all times.

DIDN'T SEE THE CALF.

CHARLES E. FARR, a dealer in motorcycles and supplies in Canastota, N. Y., passes this one along:

"A gentleman from our rural district was passing our busy corner a few days ago when an automobile and a motorcycle turned the corner abreast. The farmer dodged the car but failed to see the motorcycle and received a bump which damaged nothing except his dignity. The motorcyclist stopped and exclaimed: 'I tooted my horn, why didn't you get out of the way?'"

"'Well, young feller,' retorted the rustic, 'I dodged the ottermobile, but I didn't know the gol durned critter had a calf, that's why.'"

Heard it before? So had we, but good motorcycle humor is scarce and there ought to be more than one round of laughs in the above.

AMONG THE MISSING.

WBROWN, of 8015 Seventeenth avenue, Brooklyn, N. Y., reports the theft of his M. M. machine, which he describes as follows: It had the regulation circular M. M. tank, nickel-plated, maroon finish on frame, Eclipse free engine clutch, Standard speedometer, Bosch magneto, hand idler lever made of a piece of gas pipe, 26 x 2 1/4-inch Diamond tire on front wheel and 26x 2 1/2-inch Continental tire in rear. The lower tube of the upper frame construction was cracked just aft of the junction with the forward downrunner tube, and another distinctive mark will be found in the idler to which two ball-bearing roller skate wheels had been attached for contact with the belt. The machine had been used with a sidecar and should show marks of the fittings. Brown offers a reward of \$25 for the recovery of his mount, which was stolen on September 7.

READING WANTS MOTORCYCLES.

MOTORCYCLE mail deliveries for Reading, Pa., have been taken under consideration by the Postoffice Department in its efforts to solve the problems in this city's postal system. An inquiry has been directed to Postmaster High requesting his opinion as to the feasibility of the service for suburban work.

A MOTORCYCLE AMBULANCE.

THE police of Philadelphia have gone on record as the first to use the motorcycle as an ambulance. The precedent was established recently when a young man was thrown by a fire engine in the vicinity of the Keith theater. A motorcycle policeman carried the injured man on his motorcycle to St. Joseph's Hospital.

PITTSBURG TOURISTS.

R. L. BAKER and F. Hartman, Pittsburgh motorcyclists, returned to their home city a few days ago after a 3,500-mile tour. They left Pittsburgh on Sunday, August 18, and rode to Erie, Buffalo, Toronto and Montreal. Then they headed southward,



Hartman and Baker.

riding through New York State and taking in a part of Connecticut also. On their arrival in New York City they visited the Brighton Motordrome and witnessed one of the race meets. From New York they proceeded through New Jersey to Atlantic City and then to Philadelphia, from which point they made the final jump to Pittsburgh. They found good roads as a rule, and experienced no mechanical trouble. Baker reports that he did not have to touch his machine with a tool throughout the trip. The accompanying photograph shows the riders with their Excelsior machines, Baker on the left.

ON GEORGIA ROADS.

CARL H. O'BANNON, of the Claxton Ice & Coal Co., of Claxton, Ga., writes the following interesting letter concerning a motorcycle trip which he recently made to Statesboro, 25 miles from his home town:

"I have only been in the South a short time, and therefore I am not very familiar with road conditions. However, I have used a motorcycle for several years and have taken some long and hard trips, but for a short journey the one I am about to describe was certainly fierce. I ride a 7 h. twin M. M. with "V" belt drive, and decided that I could travel to Statesboro, 25 miles distant, without difficulty.

"I was told that I would have good clay roads, but found that they were anything but good, there being only two miles of clay road, and that was divided into stretches of about 200 yards. In places I could ride the side path, but at most points this was full of washouts and chuckholes. The sand was very deep and heavy, and I skidded and did all sorts of stunts. In many places I had to push. About every two miles I would have to cross a creek,

varying from 2 to 10 feet in width, and from 2 inches to 1 foot in depth. On each side for quite a distance the road was soft and swampy, and always after pushing my machine I would have a steep, sandy hill to start on, with a wet, slipping belt.

"In one place a clay causeway had been washed away, leaving a gap 10 feet wide and 6 feet deep. It being impossible to ride or push through, I had no alternative but to carry my machine across. I am not a weakling, but I must say that it is not an easy task to carry a 200-pound twin up a steep bank.

"Seventeen miles out I came to a small river. This was the last straw, so I turned around and started for home. I was so tired I could hardly move. Fortunately my motor was in good shape and I did not experience any trouble in this line. In trying to get in before a rain storm I got my first spill and bent a crank. When I was about four miles from home the rain started to come down and soon short-circuited the plugs. I set the machine on the stand and went under a tree, but was chased out by a number of rattlesnakes.

"Finally the rain stopped, but my motor was so cold and stiff that I could not turn it over. After considerable trouble and hard work I managed to get started, and after some more hard riding I eventually reached home, and home was never more welcome."

A TRIP TO NEW YORK.

J. WEBSTER EVANS, of Geigertown, Pa., recently made a motorcycle trip to New York city and return which he describes as follows:

"I left Geigertown at 6:15 a. m. on Friday, August 23, and made the run to New York in time to dine there at 7 p. m. Two hours and forty minutes were lost at Philadelphia, where I bought a new inner tube and other supplies. I had good roads and only a few hills on my run through New Jersey. I went via Camden, Burlington, Trenton, New Brunswick, Jersey City, and then to New York by ferry. For the return trip I left New York at 10:30 a. m., and rode to Pleasantville, N. J., along the shore road via Lakewood, covering 148 miles. Here I remained overnight, and in the morning I visited Atlantic City. I left for home at 10:50 a. m., going via Egg Harbor City and Hammonton to Camden, and then by ferry to Philadelphia. I reached the Quaker City at 1:30 p. m., and left at 2:45, arriving back in Geigertown at 6:30. I was delayed about an hour between Morristown and Pottstown by a blow-out. Four and a half gallons of gasoline were consumed, and the outlay for the trip was \$2.53, or an average of three-fifths of a cent per mile.



J. Webster Evans, Geigertown, Pa.

PLUCKY GIRL MOTORCYCLIST HAS HARD GOING

Miss "Cy" Woodman Reaches Rochester On Transcontinental Trip After Severe Falls and Ten-Days' Delay Following Spectacular Plunge Into a Mud-Hole—Interesting Experiences En Route.

By "Cy" Woodman

ROCHESTER, N. Y., Sept. 17.—I sure have had some rotten weather and heavy roads since starting on my New York to 'Frisco ride. It rained a portion of every day up to the time of my being stalled for ten days after a fall, and a steady downpour has delayed me during the last two days. The following will give any "would-be transcontinental motorcyclist" some idea as to the condition of the State roads: New York to Tarrytown O. K.; to Fishkill a long strip of No. 1 stone, which I ploughed through, my tires standing up under it; to Poughkeepsie good; to Albany excellent; to Amsterdam, rotten; here I carried my machine down thirty-six flimsy steps with a boy's help, and dragged it into a row-boat to be ferried across the river. On reaching the other side I was most agreeably surprised to learn the charge was only fifteen cents. From Palatine Bridge to Fonda will be found four miles of the worst road in this section of the country. It is well to look out for a "speed trap" at St. Johnsville. The road to Utica is fair except for the detour at Little Falls to Herkimer; further on the road is torn up for one mile. There will be found one excellent stretch of macadam road from Utica into Syracuse. From Cayuga to Geneva there is nothing but a sandy road-bed. Going into Rochester I encountered half a mile of No. 2 stone.

Welcomed Along the Route.

All riders along the road salute me and call out "Hello 'Cy.'" I have had a number of brushes with different makes of machines and what pleased me the most was the way my Flanders 4 took a hill that a twin of another make fell down on. Of course the rider blamed it to his weight (he claiming to weigh two hundred pounds.) It sure is laughable what gifts are thrust upon me; in some measure I am getting too popular for my own comfort. On stopping at farm houses I am loaded down with the most delicious chocolate pies and cakes and milk with real cream on it. Just think, this milk is only bringing two and three cents per quart wholesale. At one place the farmer queried as follows: "Be ye one of them pesky suffragettes?" My answer must have satisfied him, for I got the milk.

On the whole I don't know but what the worst feature of my ride is trouble with dogs, or just plain everyday muts, who will jump back and forth, seemingly playing tag with one, but incidentally trying to get a piece out of your legging. To be sure one has to expect a spill now and then (would rather miss it if it didn't come along), but when it takes the form of a nasty one, as the following will illustrate, it causes one to feel mighty thankful that the ride is only 3,800 miles. When I struck the bad stretch of road I am about to refer to, near Palatine Bridge, I shut down to about ten miles per hour, but my front wheel skidded in the soft mud, throwing me into a hole two feet deep and filled with muddy water. As I was going over the handle bars, I remembered to relax all my muscles and twist myself so as not to strike on my head and have any broken bones. There was a mo-

tor car coming slowly from the opposite direction and when it was about five hundred feet from me, the car was stopped and three men came running towards me, one saying as he came up to me: "My God! I thought you were killed." I replied, "Never mind me, but get my machine out of that hole." I was severely bruised from my waist down and my machine was damaged by the condenser in the magneto getting punctured. The men invited me to go back to New York with them, and on my refusing they drove off; as they went by I heard one say: "She's a plucky little devil."

A Delay of Ten Days.

I drew up to one side of the road and waited for about an hour until a team and farm wagon came along and with the farmer's help I lifted the motor into the wagon and had it carted four miles into town to the nearest garage. There I was stranded for the next ten days, waiting for my magneto to be returned from the factory. The day I left on my second start I ran into a speed trap at St. Johnsville, as I was endeavoring to make up lost time. A man dressed in a gray business suit stepped out from one side of the road and signalled me with uplifted hand, and thinking he might be some one with a message for me, sent on from the village, I stopped. Then he showed me his badge, informed me that I had been riding thirty-five miles an hour and said that I was to come along and explain matters to the judge. He said it wouldn't be necessary for me to walk into town and that I might ride in and the folks would tell me where the court was.

Well, I went back, and when I got into that town I started things moving right away. On learning that the judge was not married I saw it was up to me to try and create as favorable an impression as possible under the existing conditions, and I did. It does not seem possible that such a crowd could collect so quickly in a town of that size. Turning to the men I simply told them it was up to them to help me pay my fine by buying postcards, with the result that I was totally cleaned out and had to telegraph ahead for more cards to meet me on my next stop. When they discovered who I was I was sort of honorably discharged. A number of motorists whom I meet pay 25 and 50 cents apiece for my cards and in the evenings I sell them at the moving picture theaters. The next stunt that was pulled off was when my machine took some big hurdles, there being two large logs lying directly across my path. I took these hurdles when it was dusk, and really did not intend doing any real fancy riding. Just couldn't help it.

Weather and roads being favorable I make one hundred and fifty miles in a day of five hours' riding. On good clear stretches of road I have been making forty-five miles per hour. At Amsterdam the folks were somewhat skeptical and had the motorcycle officer pace me into Fonda. On his leaving me he saluted and said: "You made forty-seven, Miss 'Cy.'"

I was so keen on making up lost time that I thought I would go in for some night riding,

and not being equipped for such work, having only an oil lamp to use in cases of emergency, it came near proving my undoing. Every bump I took my lamp went out and one time I just skimmed the side of a horse and buggy, the latter being without a light. I rode this way until midnight and then my oil gave out just as I came to four corners. I could not see any guide posts and any road was a gamble, so I tooted my horn until a motorcyclist rode up. Just as he appeared I turned and ran into a ditch and up an embankment and was straddling my machine and holding it up, fearing to move lest I go down and out altogether when he hailed me. On looking up he said: "What in — are you doing up there?" I was feeling not any too lively, and answered: "Thought I would take a little run up here and look over things just for exercise." While talking things over this rider's light gave out and he started down the road striking matches to see if he could find a milepost; evidently he did not for he failed to return. After dragging my machine to one side of the road to a stone fence, I got my khaki skirt from my luggage carrier and with my sweater thrown over me I bunked by the roadside for the remainder of the night, watching the stars. At daybreak I was off on my way to Rochester and did the twenty-five miles into that city in just three quarters of an hour.

STANDEN STILL WINNING.

ST. LOUIS, September 15.—A large crowd was again treated to a clean sweep tonight by Albert Standen, the boy from the rural districts of Ohio. He has monopolized the racing at the popular South Side track to such an extent that the spectators know what to expect when the Oberlin flyer's name appears in the race list.

One feature of the night's racing was the improved riding of Henikman and Traffsky, who furnished some excitement for the spectators in their fight for second and third positions in the final mile of the ten-mile race.

It was announced that Brownie Carlslake had challenged Standen to three races. The local idol has accepted.

The feature event of the evening was the ten-mile free-for-all professional race. Standen took the lead after the first mile had been run off and was never headed, although Henikman pushed him hard for two miles. After this Henikman began to fall behind, putting him right alongside Traffsky. Then these two lads had their exciting fight for the second and third money, with Traffsky coming out on top at the finish.

Standen, riding for St. Louis, captured the four-cornered intercity match in two straight heats. The invitation professional race to be decided in the best two out of three heats, each heat being two miles, was won by Henikman in two straight heats, after a hard fight with Traffsky, who ran second in both instances.

KENNETH HANKINSON, a New Jersey farmer, is gaining knowledge regarding farming conditions, while on a motorcycle trip from New York to San Francisco.

TRI-STATE RUN PROVED EVENTFUL

Middletown Club's Endurance Contest Gave Riders Severe Test—Campbell's Game Showing After Injury Sustained in Fall.

DESIGNED solely to stimulate interest in motorcycling throughout a section of the country where motorcycles, while known, are not popular or numerous as yet, the three days' Tri-State endurance contest of the Middletown (Ohio) Motorcycle Club, held on Saturday, August 31, Sunday and Monday, September 1 and 2, proved to be all that its name implied.

At first it was intended to make this a big open run, but because of the lack of time for preparation and the conflicting race meets held in other nearby towns, it was decided to leave the affair open to club members only. The start was made at 1:20 p. m. Saturday, August 31, from the United States Hotel, at Middletown, the first stage of the journey being to Hamilton, where the roads were found fair but dusty. Just after the riders left Hamilton rain fell for ten or fifteen minutes, and this was followed by heavy hail, which made the red clay roads exceedingly slippery. In fact, there was not a single rider in the party who escaped going into the ditch at some time.

Greensburg was set as a night control, and despite the rocky roads and quite a little tire trouble, all of the riders got into Greensburg before the checking time, 6 p. m., with the exception of Andonie Corsie, of Middletown, who rode a 7 h. p. Indian. Corsie had tire trouble and later broke a priming cup. He did not arrive in Greensburg that night at all and was officially out of the contest. The distance to Greensburg was 80.6 miles. The second day's run was a real contest in many ways. The riders were checked out of Greensburg at 6:30 a. m., the route being to Horace, West Port, Sherwood, to North Vernon, and from North Vernon through Seymour to Crothersville, Scottsburg, Memphis, New Albany, and thence to Louisville, where the checking in time was set for 1:30 p. m., with the limit at 2:30 p. m. The scoring was on a basis of 1,000 points, and checking in ahead of schedule time resulted in a deduction of 2 points for each 5 minutes late, and for being late at controls, 1 point for each 5 minutes.

The Sealbach Hotel was the official headquarters, and all the riders stored their machines with R. L. Davis, Pierce, Pope and Reading Standard agent in Louisville, where free stories, free cigars, and free other things were passed out by the generous Bob.

The first sign of trouble came between Greensburg and North Vernon, when F. L. Valiant, chain-drive Flying Merkel 6, blew a tire while rounding a sharp turn. Valiant rolled off into the ditch, but was unhurt. This turn was so treacherous he decided to wait and see what happened when the others came around. Standing on one corner with his speed camera poised, he was rewarded when Ford Sanford came around at 25 miles an hour. The machine slid out from under him and Sanford went slithering across the road, but without any ill consequences.

The roads were fair from Greensburg to North Vernon, with the exception of spots where fresh crushed rock had just been dumped. There was not a rider in the race but had cuts and blow-outs, and punctures.

Going out of Seymour deep sand was encountered, and this continued for a number of miles towards Louisville. The only real mishap of this stage of the journey was when

Jesse Campbell, of the Yale team, hit a large dog while going at about 35 miles an hour. The machine turned off into one side of the road and Campbell landed heavily on his wrist in the middle of the road. By the time Seymour was reached, where a stop for gasoline and oil was made, Campbell's hand and wrist were as big as his shoulder. He was in great pain but pluckily decided to continue.

At New Albany, just before crossing the Ohio River Bridge, a number of the members of the Louisville Motorcycle Club met the party and guided them across the bridge.



Top Picture—The Start from Middletown.
Center—Fording a Stream in Kentucky.
Bottom—Kentucky Moonshine.

Valiant was the first one to check in at the Louisville control, followed by a Yale trio, and a majority of the others in quick order. Emmet Huntsbarger, another of the Merkel riders, and Frank Leshner, of Dayton, also a Merkel rider, who were riding together all the way, got on a wrong road which carried them about 22 miles out of their way. Huntsbarger just got in by the skin of his teeth, while Leshner was eight minutes over the limit in checking in at Louisville. The second day's mileage was figured at 114.7, but as nearly all of the riders had to make detours on account of torn up road, the distance was considerably more than that.

The third day was from Louisville back to Middletown, a distance of 181.5 miles. The start was fixed at 6 a. m., but on account of ferry delays and other minor things the riders did not get started much before 7. This meant beating it all the way back to cover the 182 miles before 4 p. m., which was the checking in time at the Middletown control. The official route was from Louisville to Jeffersonville, to Marble Hill, Madison, Vevay, Rising Sun, Lawrenceburg, Cincinnati and Hamilton, while an alternate route through Kentucky was offered. The distance was about the same, except that the Kentucky route had the disadvantage of being dotted with about 30 toll houses at distances of 4 or 5 miles apart, which caused a lot of delay. Corsie, the Indian rider, who had shown up some time during the night and continued as a survivor, started off with the rest of the party. A few miles out of Louisville, Kinney, Indian single, who up to this time had made a splendid run all the way, went down and out with a broken piston. A few minutes later Ford Sanford, one of the Merkel riders, who up to this time had a perfect score, had a blow-out, and Huntsbarger, another of the Merkel riders, also had a blow-out, while Leshner picked up a big nail in his rear tire. These three mishaps necessitated a delay of about an hour and forty minutes, so that the Merkel riders had to open wide to make up time.

The Merkel riders report that from start to finish of the run none of them opened his tool box; all the trouble was with tires, and from this trouble no one was immune.

Perhaps the most noteworthy run, from a human endurance standpoint, was made by Jesse A. Campbell. Despite the fact that Campbell's injured hand was practically useless, he finished with a perfect score. He has been laid up with his arm ever since. Solid gold medals will be awarded to those finishing with a perfect score, and silver medals to the survivors. The list of perfect scorers follows: F. L. Valiant, Merkel 6; George Squier, Yale 7; Jesse Campbell, Yale 7; J. F. Meyer, Yale 7; R. E. Morrison, Indian 7; Ward Jones, Indian 7; Clayton Palmer, Indian 4. Leshner, Huntsbarger and Sanford, Merkel riders, had 998, 994 and 993 points, respectively, at the finish.

KEPT OPEN HOUSE.

INDIANAPOLIS, Ind., September 14.—The Indianapolis Motorcycle Club kept open house tonight at its new clubrooms, 334 N. Illinois street. Out of town riders who had come in to see the motorcycle races here today were the guests of the local club. A subscription list was passed among the local dealers and riders for the purpose of furnishing the club and over \$200 was raised. Pool tables, reading tables and chairs are to be purchased at once.

INTERNATIONAL TOUR



IN the article which follows Donald McKie, who is keeping "the log" for the Atlanta tourists during their European trip, deals chiefly with roads, traffic customs and garages in Germany and Austria. This instalment carries the tourists from Berlin to Leipsic and Dresden, over the line into Austria and on to Vienna and finally to Budapest. The next instalment of McKie's article will find the Atlanta quartet in Munich.

We remained in Berlin for a little over a week, and during that period, with the aid of our motorcycles we saw more of the city than we could have viewed in the same time by any other means of transportation. It also goes without saying that our trips were made much more economically than they could have been made otherwise. However, the street car system in Berlin is excellent, being operated by the city. There are no straphangers; the conductor allows only as many passengers as can be seated to board the car.

Traffic in Berlin is rather heavy at several points, but nowhere does it compare with that of downtown New York. There are some Berlin streets so narrow that traffic moves only in one direction, but there is always an officer stationed at these places to prevent a visitor from going wrong. On the whole motorists are well cared for in the German capital. One side trip out of Berlin that should not be overlooked is to Potsdam, the home of the royal family. The road to Potsdam is excellent and the run is about 30 kilometers.

Berlin to Leipsic.

We left Berlin on July 24, and with some difficulty found our way to the next small town. For some distance out of the capital the pavements are of cobble-

stones and worn macadam, but later they improved and were better than any highways we have back in the States. Aside from a few bad stretches in small towns these road conditions prevail all the way to Leipsic, a manufacturing city of 600,000 people and very few motorcycles. At the office of the Hamburg-American line we obtained a map of the city free of charge. With this we quickly found the points of interest, including the Victory Monument, erected in commemoration of the war of 1813.

A cross-cut put us on the main road to Dresden. One of our spare oil cans, containing Mobiloil B which we had bought in Berlin, began to leak and it was necessary to empty it. At Tergua we paid a toll of five cents for the four of us to cross the Elbe river. Riding along slowly we were overtaken by a man mounting a little 3 h. Wanderer. He accompanied us until one of our clutches gave trouble and we were forced to stop. We took the clutch apart and finally finished the repair with the aid of an Old Sol lamp and Presto tank. We then discovered that we were too

far from any town to ride in and decided to sleep by the wayside. We found a wheat field and crawled into one of the stacks.

Dresden's Points of Interest.

Early the next morning we rode on to a small town for breakfast. Then we headed for Dresden once more over a road which winds in picturesque fashion along the Elbe river. This route is fine until the rider nears the city where the roads are pretty well cut up. On the edge of the city one of our machines ran out of gas directly in front of a motorcycle shop. A policeman helped us to replenish the tank. Later an officer gave us an order in German which we did not understand. However, we thought it wise to move on and found that we had been using our machines on a street where motor vehicles were barred. It was a close call for us.

Dresden is a city of many good points. A week may be spent here profitably. No visitor should miss the art galleries and museums. We abandoned our machines for three days to visit them. We made a side trip to Bastei, 50

kilometers from Dresden over a fine road. All the hills, some of them really stiff, were climbed with my tandem passenger in his saddle. On leaving Dresden we struck mountains and some hard going. This leads us to suggest that motorcycle tourists should clean their motors in Dresden and put their machines in tip-top shape. They will need all their power, although the roads are uniformly good. It is only the mountain-climbing that may give some trouble.

Invading Austria.

Finally we reached Zinnwald, and a short jaunt brought us to the offices of the German and Austrian customs. The German officials stamped our traveling card



Mid-day Meal by the Wayside.

to show the time we left the country and then—directly across the road—we encountered the Austrians. We expected to be allowed eight days in Austria without any trouble, but none of the officials could speak English and our small knowledge of German prevented us from understanding the situation fully. We showed all our credentials, and they finally said something about 300 marks. We shrugged our shoulders vigorously to indicate that we didn't understand and finally we were allowed to proceed. The officers did not stamp our papers and we assume that we may remain in Austria as long as we please. However, there may be a surprise for us when we leave.

From the top of the mountain we obtained a wonderful view of the surrounding country. We rode down with our engines cut out, at times coasting at a speed of 40 miles an hour. The coast lasted for seven miles. Not once did we turn on power. Then we struck Tepitz, the first town in Bohemia. Gasoline came too high for us there and we rode on to Laun, where we filled our tanks at the standard price.

A Garage "Hold-Up" in Prague.

In due time we reached Prague, the chief Bohemian city, going in over bad roads and very steep hills. Here we were "held up" for the first time at a garage. Without inquiring the price we had five litres of gasoline put in our tanks, and then found that we were to be charged 80 hellers, or 16 cents per litre. This figures out at about 70 cents a gallon. We protested, but had to pay the bill. This suggests a tip for touring motorcyclists: Always ask the price of an article before agreeing to take it. This will save money and trouble.

In this district we saw a number of sidecars, driven usually with the Puch machine; twin cylinder mounts with flat belt drive. There were a few singles also with sidecars. All seemed to have two-speed gears. How a single can handle a sidecar in that mountainous country, even with two-speed gears, is a mystery to us. We spent the night at Stecken. The next day we rode only 44 miles, a heavy rain having left the highways slippery. We were soon through with Bohemia and rather glad of it. Motorcyclists will not lose much by leaving it out of their European touring routes. If we had to make the trip again we would skip this district.



A Short Stay in Vienna.

At Iglau, in the next State, we bought some gasoline which cost us 76 hellers, or about 15 cents a kilogram. We came to the conclusion that the reason there are so few privately owned motorcycles and automobiles in the countries we have visited is because the price of gasoline is out of all reason. We had a surprise, however, in Iglau for it was explained that a citizen of the place could buy gasoline about as cheaply as we do in America, for his own use, but when it is to be re-sold the government levies a tax on it. In other words, the visiting motorcyclist has to stand the gaff.

We reached Vienna at night. For 70 kilometers going to the city the roads are somewhat better than those encountered earlier in Austria, but not up to the standard of those in Germany and certainly far inferior to those of Denmark. In Austria the custom is to drive

on the left side of the road, but having had some practice in this in Sweden we have not been bothered seriously.

In Picturesque Budapest.

After leaving Vienna our next stop was at Budapest. Here, for the first time, we found a radical departure from the customs and dress of our own country. We found ourselves in an excellent position to study the people, for riding our machines appeared to keep us in close touch with them. The costumes are remarkable and quite picturesque. Roads from Vienna to Budapest are fair. The latter city is located in Hungary, we having passed out of Austria less than 100 kilometers from Vienna.

We climbed some mountains on the way but Budapest is worth an effort. Returning to Vienna we took a boat up the beautiful Danube river, its banks lined with ruins of historic old castles and forts. We experienced no trouble in having the motorcycles carried on this boat. We simply pushed them aboard as we do on ferries in America, but we were forced to drain the gasoline from our tanks.

(To be continued.)

SAN BERNARDINO RACES.

MOTORCYCLE races are scheduled to take place on Thanksgiving Day in San Bernardino, Cal., under the auspices of the San Bernardino M. C. Ray Peck, Graves, Seymour, Wolters, Samuelson, Balke and other well-known riders will compete.

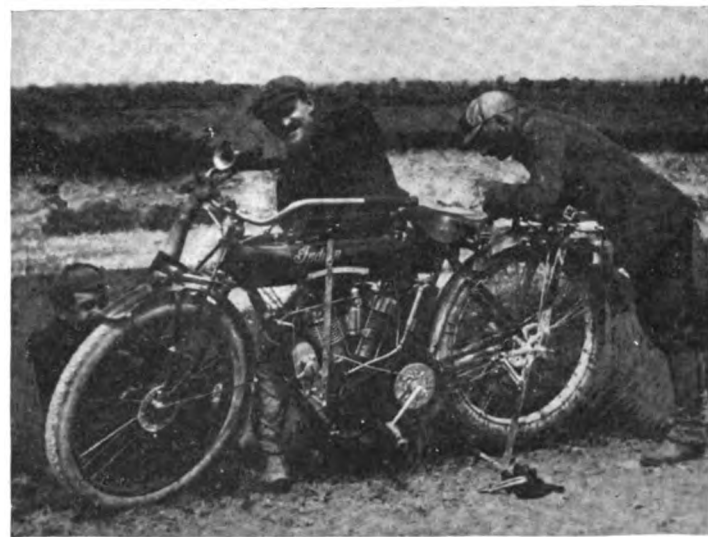
BENEFIT RACES.

MEMORIAL races for the benefit of Mrs. Edwards, widow of Curtis "Cort" Edwards, were held at the Riverview Motor-drome, September 14 and 15. The entire receipts of both performances will be given to the young widow.

TOURED TO INDIANAPOLIS.

HERBERT ANDERSON and Roy Wilson, of Olathe, Kansas, recently completed a 3,000-mile trip from their home town to Indianapolis, Ind., and return. They were away four weeks and encountered considerable mud

WHILE warming up for one of the races in the meet held recently at Rockville, Md., Thomas Dedge, the well-known Maryland speedster, fell and broke his left wrist.



Atlanta Tourists Caught in Rain on a German Road. A Stop for Repairs.

SIXTEEN RIDERS FINISH LONG NEWARK RUN

Starters Numbered Twenty-Eight, But 325-Mile Grind Through Jersey Sand and Over Hills Into New York State Reduced the List by Twelve—Yale Team Scores.

TWENTY-EIGHT riders left Newark, N. J., at 6:30 p. m. on Saturday, September 14, in the 24-hour endurance run of the New Jersey Motorcycle Club, and late on the afternoon of the following day 16 dusty roadsters checked in after having completed the 325-mile course, which led them through southern New Jersey, up into New York State and back to Newark. The other contestants were forced out along the route by various mishaps. No statement could be made as to the exact standing of the finishers at latest reports, owing to the fact that the checking sheets had not been received from the controls at outlying points.

The riders were sent off at one-minute intervals from the club's headquarters in Washington street, Newark. The route carried them through Elizabeth and then southward to Perth Amboy, Keyport and Freehold. The first control, in charge of Roy Pascal, was established at the latter place. From Freehold the route was across the State to Trenton, where the riders were checked in by members of the Central Jersey M. C. at midnight. From this point the route was to Princeton, Somerville and Phillipsburg, where the riders stopped for a hasty breakfast just before daylight.

The wise ones replenished their supplies of gasoline and oil at this place before essaying to climb the hills of North Jersey, through Hackettstown, Newton and Sussex to Port Jervis, where the State line was crossed into

New York. Thence the route led to Newburg, where the turn was made for home.

The special trophy for the team with the best score goes to the Yale trio, composed of P. W. Stevens, Ortie Stevens and George Riechey, of East Orange. The Indian team was put out of running, and the chances of the Excelsior team went a-glimmering when Andy Bohsen, one of the members, broke his exhaust valve lift at Washington and came home on one cylinder.

Mrs. Clayton Cox, of Elizabeth, was the only woman to take part. She rode with her husband in a side-car, but the pair were compelled to drop out at Somerville during the night, as their supply of oil had run out and they were unable to find a garage open.

Caesar Canara, of Newark, a member of the Indian team, had a bad spill at Branchville when he attempted to negotiate a turn while traveling at 40 miles an hour. He went off the road into a ditch and received a badly cut eye and a gash in his scalp. Seth Eberhardt and Howard Hill, his teammates, stayed with him and helped him to a physician. They lost so much time that they decided to cut the course and return home.

The list of those who finished is as follows: P. W. Stevens, West Orange, 7 h. p. Yale; George H. Riechey, East Orange, 7 h. p. Yale; Ortie Stevens, East Orange, 7 h. p. Yale; E. W. Allen, Newark, 6 h. p. Excelsior; S. Benedict, Newark, 6 h. p.

Excelsior; Stanley Beach, East Orange, 6 h. p. Excelsior; Peter Bohsen, West Orange, 6 h. p. Excelsior; Fred Cordes, Maplewood, 7 h. p. Excelsior; E. M. Miller, New York City, 4 h. p. Flanders; Fred Voelker, New York City, 4 h. p. Flanders; Arthur La Roe, Perth Amboy, 7 h. p. Indian; James Fenton, Trenton, 4 h. p. Harley-Davidson; R. C. Queen, Tarrytown, 7 h. p. Excelsior; W. A. Ford, White Plains, N. Y., 6 h. p. Excelsior; Watson Kluczek, West Orange, 4 h. p. Harley-Davidson.

Following is the list of remaining starters, who failed to get through: Gustave E. Heppler, Newark, 7 h. p. Yale, out at South Amboy, spilled and bent frame; George E. Buchanan, Newark, 4 h. p. Excelsior, out at Hampton, ran out of gasoline; Elliott D. Holton, Newark 4 h. p. Excelsior, lost road and dropped out at Phillipsburg over one hour late; George E. Byrnes, Newark, 4 h. p. Reading Standard, stuck by Holton, out at Phillipsburg; Andrew Bohsen, West Orange, 6 h. p. Excelsior, broken exhaust lift, out at North Branch; H. F. Mansfield, Newark, 7 h. p. Yale, dropped out at Phillipsburg; Caesar Canara, Newark, 7 h. p. Indian, fell at Branchville and cut about head, dropped out; Seth Eberhardt, Newark, 7 h. p. Indian, and Howard E. Hill, Newark, 7 h. p. Indian, both out at Branchville, taking Canara to a physician; Mr. and Mrs. Clayton Cox, Elizabeth, 7 h. p. N. S. U. and side-car, out at Somerville, lack of oil; Fred C. Mohrfeld, Trenton, 4 h. p. Flanders, out at Hackettstown.

LONDON CLUB ACTIVE

Ontario Squad Boomed Interest in the Motorcycle by Holding a Series of Race Meets.

FOR the purpose of building up its own membership as well as furthering the interests of the Canadian Motorcyclists' Association and the game in general in the whole district of Western Ontario, in which there are many thriving towns, the riders of the London Motorcycle Club, headed by J. W. Cunningham, who happens to be the good vice-president of the Canadian Federation, have been conducting an active racing campaign all season.

First of all, the "Cockneys" featured a race meet in their home town on the 24th of May. They then "circuited" to the Chatham and Brigden "gasoline alleys" during July, and on September 7 they staged the best meet they have ever conducted at St. Thomas before a lively and enthusiastic crowd. With the exception of London, none of the other cities had ever seen any motorcycle racing before and the good accomplished can be better imagined than described.

The plan of arrangements for the St. Thomas show consisted of spending \$200 for advertising the event. The town was "plastered" with posters and circulars, while on the morning of the eventful day, an imported band paraded the streets followed by the riders on their snorting mounts.

The half-mile track at St. Thomas was not up to much, but the riders made the most of it and no races were hippodromed. The ruts caused several spills, in one of which A. Thorpe, of London, was thrown twenty-five

feet over his handlebars and his machine damaged, but fortunately no one was seriously mugged. A race had been arranged between an auto and a motorcycle, but this was called off owing to the non-appearance of the four-wheeler. It was later learned that this machine had been stalled on roads through which the "single-trackers" had traveled with comparative ease.

Four races were put on, including an unknown distance affair. T. Kerr, riding an Emblem, captured the five-mile single-cylinder race in 7:25, while the same rider with a one-mile start took the ten-mile handicap, with T. J. Maher, on a double-barreled Indian, second from scratch. In this event Maher had made up half of the margin between himself and the winner before the finish. Thorpe won the five-mile twin-cylinder contest, with Maher second and Kerr third. Time, 6:39.

A TUBING TIP.

CE. ANDERSON, an observant motorcyclist of Middleboro, Mass., calls attention to the fact that a section of the stem of an ordinary clay pipe will serve admirably as a connecting link between two pieces of Prest-O-Lite tubing. One pipe stem will make several "connectors" and it will be found just the right size for a snug fit in the tubing.

AT GRAND RAPIDS.

SEVEN events were staged in a race meet at Grand Rapids, Mich., on Labor Day, under the auspices of the Grand Rapids M. C. In spite of threatening weather a fair-sized crowd saw Byrne Hall Indian, Joe Poisson (Indian), and Gable (Excelsior), carry off the honors.

COAST-TO-COAST HIGHWAY

Motorcycle Men Agree to Boost Project Which Is Endorsed at Indianapolis Banquet.

INDIANAPOLIS, Ind., September 11.—Motorcycle manufacturers were not forgotten here last night at the Carl Fisher banquet, when the plan to build a coast-to-coast highway was endorsed. Toastmaster Bookwalter, in introducing G. H. Westing, who spoke in behalf of the motorcyclists, said:

"The motorcycle industry has grown until now it is ready to take its place alongside the automobile game, and no longer can the two-wheelers be looked down upon. I feel that the motorcycle manufacturers should be given great consideration in connection with the building of this highway."

Mr. Westing, of the G. H. Westing Company, then addressed the assembly. He said he felt free to state that the motorcycle manufacturers will heartily endorse the project.

Motorcycle manufacturers will be asked to contribute one-third of one per cent. of their gross profits for three years, or in other words, one per cent. of their gross receipts for one year. It is figured that if all of the manufacturers interested in building the coast-to-coast road will contribute on this basis more than \$10,000,000 can be raised by the first of next year and the road can be finished in three years' time.

E. FRANK WINFIELD and his wife who are making a long tour through the west, reported at Grand Junction, Col., on August 30 Up to that time they had covered 1,124 miles.

FAST FINISHES IN BRIGHTON MATCHES

BROOKLYN, N. Y., Sept. 13.—John McNeil, the Scotch rider, again proved his class by winning the special match race of three miles from John Cox, in straight heats, at the Brighton Motordrome tonight.

Arthur Chapple, on scratch in the six-mile handicap race, conceded a lap to the rest of the field. He caught the riders on the fourth mile and gained a slight lead which he held to the finish. Billy Shields tore after Chapple as he was passing the other riders and jumped from last place to second, in which position he finished. George Lockner was in third place.

Three heats were necessary in the Shields-French three-mile match race. The former won by inches in the final lap. George Lockner captured the three heats of the five-mile pro race, with Ira Vail second and Billy Wray third. Summaries:

Match race, three miles, between John McNeil, of Scotland, and John Cox, of New York; first heat won by McNeil, J. A. P.; time, 2:09½; second heat won by McNeil; time, 2:06½.

Match race, three miles; William Shields, of Syracuse vs. J. B. French, of Brooklyn; first heat won by Shields, Indian; time, 2:20½; second heat, won by French, Indian; time, 2:19; third heat, won by Shields, Indian; time, 2:18½.

Six-mile race, handicap; won by Chapple (scratch); Shields (1 lap), second; George Lockner (1 lap), third. Time, 4:14½.

Five-mile race, open, 61:00 Class; first heat won by Lockner, Indian; Ira Vail, Brooklyn, Indian, second; W. H. Wray, New York, third. Time, 3:49½. Second heat won by Lockner; W. Wray, second; Ira Vail, third. Time, 3:46½. Third heat won by Lockner; Ira Vail, second; Wray, third. Time, 3:47½.

MCNEIL DEFEATS CHAPPLE.

ARTHUR CHAPPLE, the Brighton speed king, had his colors lowered in the final heat of his match race with James McNeil, of Scotland, on September 12. Neither Chapple nor McNeil rode his own machine. Chapple attempted to start this eight-valve motor three times, but was unable to get it to run. He then took Lockner's machine and McNeil was placed on Billy Shields' motor. McNeil broke a valve on the first lap and the heat was not run until he got another machine. He mounted Wray's "Bearcat" motor and set out after Chapple.

Both riders got away to a good start, Chapple leading. He held the advantage for two and a half miles when McNeil opened up and passed him on the final lap, winning by an open length. The time for the three miles was 2:16½.

Herbert Ayrault, the late addition to the pro ranks, captured two heats of the three-cornered match race. He blew a front shoe in the final heat and was put out of the running.

John Cox on his new "War-whoop" rode to victory in the five-mile professional race. He won all three heats.

William Wray carried off second place and George Lockner was third.

The final event, a six-mile handicap, brought out six starters. Each man had one-half a lap handicap over Johnny Cox, who was on scratch. Cox was unable to make up the handicap and Lockner won the race by two feet from Billy Shields. French nosed out Wray for third place.

CHAPPLE'S MACHINE CRIPPLED.

BROOKLYN, N. Y., September 10.—Only two heats of the three-mile special match race between John McNeil, the Scotchman, and Arthur Chapple, of New York, were run this evening at the Brighton Motordrome.

The first heat was a runaway. Getting away on an even start, Chapple gradually drew away from McNeil and won by over 100 yards.

The second heat was more exciting. Chapple led for the first mile by a wheel's length. His front tire blew out on the beginning of the second mile and put him out of the heat and race. Chapple was riding at a terrific speed, and it was pure good luck that saved him from a serious fall.

John Cox was in a class by himself in the five-mile open professional race. He led the other riders across the finish in all three heats. The six-mile handicap race went to Herbert Ayrault, who had been presented with a two-lap handicap. McNeil started from scratch, but was unable to cut down the handicap and retired when half the race was run.

LOCKNER WINS BIG RACE.

BROOKLYN, N. Y., September 8.—George Lockner, the up-state rider, captured the feature event at the Brighton Motordrome tonight. He defeated Billy Wray, his nearest competitor, by over a mile. Earle Eckel finished third. Many stops caused the leadership to change frequently.

Lockner gained a lap on the field in the seventeenth mile, but lost his advantage when he retired for oil. He was five laps behind before he got going again, but soon cut down the distance. Shields stopped, due to feeling ill, but resumed his riding. He stopped again later in the race.

Lockner regained the lead on the thirty-fifth mile, but had to stop for oil again. Wray took the lead for a while, but fell back; Lockner again assumed command and finished strong.

John Cox led the field over the line in the six-mile handicap. Arthur Chapple was on scratch, all the other riders having a lap and 200 yards handicap.

Earle Eckel won the first heat of his match with James French after a close race.

CHAPPLE REGAINS LAURELS.

BROOKLYN, N. Y., September 14.—Arthur Chapple came back in form this evening at the Brighton Motordrome and defeated John McNeil, the flying Scotchman, in the second of their series of match races. He accomplished the feat in straight heats. The first heat was a runaway for Chapple, as McNeil had engine trouble.

In the second heat McNeil's motor was running splendidly, but Chapple led all the way. On the beginning of the third mile Chapple was in the lead by an open length, with McNeil gaining steadily. Chapple, seeing this, rode high on the bank of the track, forcing McNeil up against the fence and making it impossible for the Scotchman to pass him. Chapple kept his position and won by a foot. Chapple was undoubtedly afraid of the Scotchman, and his unsportsmanlike riding caused some comment.

ARRANGEMENTS have been completed for the second annual 100-mile race meet of the Marion (Ind.) M. C. It is scheduled to take place September 29.

DOWN THE STRETCH

September 26.—St. Louis, Mo. Race meet, under auspices of the Dayton M. C. on mile dirt track.

September 21.—Byberry, Pa. Race meet, mile dirt track.

September 21.—York, Pa. Race meet, York fair grounds; mile dirt track.

September 22.—Denver, Col. Race meet, one-third mile board track.

September 22.—St. Louis, Mo. Race meet under auspices of the St. Louis Motordrome and Amusement Co.; quarter-mile board track.

September 24.—Powell, Ohio. Race meet under the auspices of the Delaware County fair managers; half-mile dirt track.

September 25.—St. Louis, Mo. Race meet, St. Louis Motordrome Amusement Co.

September 25.—St. Louis, Mo. Race meet, Luna Park Amusement Co.

September 26.—St. Louis, Mo. Race meet, St. Louis Motordrome and Amusement Co.

September 28.—Toronto, Canada. Race meet.

September 29.—St. Louis, Mo. Race meet under auspices of the St. Louis Motordrome and Amusement Co.

October 3-12.—Birmingham, Ala. Race meet under auspices of the State fair management. Mile dirt track.

October 5.—Toronto, Canada. Race meet.

October 6.—Boston, Worcester-Providence. Under auspices of the Providence M. C.

October 12.—Salem, N. H. Race meet, Rockingham Park Co. Mile dirt track.

October 12.—Toronto, Canada. Race meet.

September 22.—Chicago, Ill. Third quarterly trial of the Englewood M. C. Ottawa and return, 183 miles.

A COLUMBUS MEET.

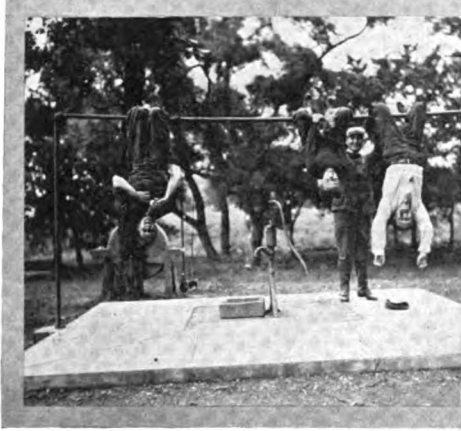
COLUMBUS, Ohio.—The Columbus Motorcycle Club is arranging to hold a racing meet some time in October. This action was taken because of the failure of the board track to draw sufficient crowds. The Columbus Motordrome Company is now in the hands of Receiver Jerry O'Shaughnessy, but no disposition has been made of the case as yet. The meet given by the receiver on Labor Day was a success from a racing standpoint, but a failure financially.

WON HIS WAGER.

W. H. MICHESON, a motorcyclist of Jacksonville, Ill., opposed the argument of other local riders who claimed a run to Galesburg, Ill., 130 miles, could not be made in less than twelve hours. He wagered that he could make it in less time and when the bet was accepted he started. He reached Galesburg in six hours, over rough and sandy roads and obtained an affidavit to that effect, thereby winning the wager.

POINT BREEZE TRACK CLOSED.

PPOINT BREEZE MOTORDROME, in Philadelphia, Pa., has closed for the season. It is announced that next year the infield is to be concreted and an entrance put in for the admission of autos. It is also the intention to hold different sports there during the 1913 season, such as aerial meets, marathon races, etc.



THE two side pictures at top of page and the two top views in lower layout show members of the Flying Merkel M. C., of Dayton, O., on a re-



cent outing. The large lower picture is of the Merkel agency in Spokane, Wash.; Merkel agency in Indianapolis appears at top of page, in center.



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J. LEO SAUER,
President

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THURSDAY
SEPT. 22, 1912

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1879.

H. N. CONDUCT,
Secretary

NEWARK'S COSTLY LESSON.

LITTLE remains to be said concerning the sanguinary affair at Newark—too many newspaper presses have already smacked glutinous lips over the sickening details—but what does remain is of such import that it should carry from coast to coast. The price has been a heavy one; the lesson should be proportionately far-reaching. To present the gist of that lesson is not the simplest of tasks, but in the rough it points to modifications in board-track racing; to calm and impartial action which will safeguard the future of a royal sport, which will protect racers from themselves and a thrill-seeking public from participation in another tragedy of the motors.

It is not the purpose of the writer to string mere words upon a thread of sympathy already sorely taxed. Newark feels the blow keenly enough. Officials of the motordrome have a full realization of their indirect responsibility, and everything possible has been done in behalf of the injured and those who mourn. These phases of the situation speak for themselves, so it is the primary aim of this article to look ahead; to suggest that the Tomorrow of board-track racing in America be relieved of some of the imperilling conditions which have darkened its Yesterday. How this reformative movement is to be launched and what its trend shall be are questions now engaging the attention of F. A. M. officials and of thoughtful motorcyclists the country over.

No reasonable person desires to place in jeopardy the financial interests of the board track promoters, for many thousands of dollars have been invested in the bowls; nor is it desirable or feasible to crimp competition rules so that motorcycle racing will enter the quoits and lawn tennis category of sports. To eliminate the element of danger in racing the single-trackers would be to give the sport its quietus. Still there are degrees of danger, and it should be possible to determine the point at which competitive endeavor verges upon unjustifiable risk. Manufacturers build 90-mile an hour machines and promoters erect bowls in which to spin them, all of which shows ingenuity and progressiveness; but is a 90-mile an hour speed essential to the survival of motorcycle racing on board tracks? We hope not.

A few days ago a racing man who has on several occasions heard the swish of the Grim Reaper's scythe, suggested to the writer that board-track racing should be confined to machines of 30.50 cubic inches piston displacement. He argued that competition could be as keen, the finishes equally as spectacular as

with the big twins, and that the danger—while still to be reckoned with—would be greatly reduced. Against this is thrown the argument that race followers, having once seen a motorcycle travel 90 miles an hour, would not pay to witness anything less sensational. If this be true there is something wrong with our national sporting spirit; we hesitate to accept this viewpoint. The suggestion relative to 30.50 machines may have its drawbacks, but a number of experienced racing men believe it deserves serious consideration, and it is offered for what it is worth.

To set aside the rider and his risks for the moment, one thing is certain; board track promoters can, and they should without delaying a single day, take steps to afford greater protection for spectators. Just how this is to be done, with justice to all concerned, is a knotty question. It has been suggested that a dummy fence be erected about three feet out from the bleacher and grandstand railing at the top of the bowl. This safeguard would keep riders clear of even those spectators who persist in hanging over the inner railing. It would obstruct the view to some extent and it probably has other disadvantages, but it would practically eliminate the danger of a machine striking a spectator. It has also been suggested that the perpendicular section of the track, above the incline, be built to a height of six or eight feet. This would lift the occupants of the seats out of harm's way, but it also has obvious drawbacks.

These are matters for calm consideration by the men who build board tracks and the officials who govern them. They must be worked out along practical lines, with due regard for the interests of track owners and riders as well of the spectators. It is not the writer's intention to advocate sweeping and unreasonable reforms, but simply to point out that the time has arrived to safeguard the future of a sport which, to put it mildly, is being jeopardized.

That unfortunate Eddie Hasha fainted while riding at top speed on the Newark bowl is the consensus of expert opinion, and it must be admitted that the conditions attending his accident might never be duplicated on a board track. Still it has been demonstrated that the danger incident to driving motorcycles at 90 miles an hour, even on the best of bowls—and the Newark track is conceded to be a model of its size—is far out of proportion to the amusement afforded race followers and the publicity returns derived by the motorcycle

field in general. Board tracks have helped materially to bring the motorcycle into the national limelight, but whether they have of late advanced the interests of the motor single-tracker along permanent and constructive business lines is open to serious doubt.

THE CAMPAIGN FOR SILENCE.

THAT it will require a persistent educational campaign among motorcyclists in this country to obtain anything like general consideration for the radical muffler reforms now being talked of by far-seeing designers goes without saying, but it is equally certain that without radical changes the omnipresent silencing problem cannot be satisfactorily disposed of. In a recent article by our English correspondent attention was called to a proposed expansion chamber, fitted just forward of the motor, and from which the exhaust gases were to be led by an extra long pipe to the rear. Theoretically, this chamber should be capable of holding about six times the volume of the cylinder capacity, and it would of necessity be a somewhat cumbersome fitting. It is for that reason, primarily, that the rank and file of motorcyclists will frown upon it.

Admitting that the expansion chamber or a considerably enlarged muffler will not be a welcome addition to the average mount, their claims to recognition must still be considered. All the larger American cities are legislating against the cut-out, and it is certain that any contrivance calculated to reduce the noise evil still further will have a most important bearing upon the future of the motorcycle. No other single feature carries more weight with the general public, that hypercritical body from which the army of motorcyclists of the future must be recruited. Accordingly the thoughtful rider should not balk at a concession or two made in the interest of silent-running.

Students of the silencing problem are apparently of one mind in saying that satisfactory muffling cannot be obtained with the small box commonly fitted, unless it is so constructed that the back-pressure will be excessive. In other words the present standard muffler does not fill the bill. It must either hamper the motor or offend the ear, and between these faults there is small choice. It remains for manufacturers to produce a comparatively small exhaust box which will give something like the degree of silence obtained with the expansion chamber, and this is admittedly a knotty task. The expansion cham-

ber embodies the correct principle of exhaust gas silencing in that it allows the gas to cool and expand before it is discharged.

For several years past it has been argued in these columns that the ideal muffler should have a capacity of six to ten times the volume of the cylinder, and this is borne out by recent tests in England. The capacities of the cylinders on the English motorcycles used in the tests were approximately thirty cubic inches, and the cubical contents of an expansion box five by twelve inches are 236 cubic inches, or nearly eight times the cylinder volume. Under these conditions the noise was negligible.

Exhaustive experiments conducted in England and continental countries eight or nine years back showed that excellent results were obtained through fitting an expansion chamber of moderate size with a pipe leading from it, the latter being sometimes divided into two or three branches. This, however, introduces the question of size and unsightliness once more and leaves the investigator just about where he started. The problem is a big one and proportionately important. Must the conservative motorcyclist ultimately accept the expansion chamber, or can standard mufflers be improved to meet the widespread and justifiable demand for more silent running?

A PUBLICITY BOOMER.

MEMBERS of the Oakland (Cal.) M. C. made the most of their publicity opportunities when preparing for the recent Motorcycle Day at Livermore, and the accompanying photograph shows a club rider with his machine placarded for a road trip. This booster is H. Conboy, of Alameda. To acquaint the natives with the plans for the big program and distribute advertising matter along the line he rode from Oakland to San Jose, a distance of about 50 miles.

CHASED FIRE TRUCKS.

NEWARK, Ohio, Sept. 19.—In an effort to discourage Newark motorcyclists who persist in chasing the fire trucks when they respond to alarms, the police recently caused the arrest of half a dozen offenders, three of whom were fined. George Stewart, Walter Kussmaul and Bun Coulter were each fined \$10.



Five miles out of Oshkosh.



Road washed out completely at Van Dyne.

THAT SENTINEL RUN.

IN the last issue appeared an account of the Milwaukee *Sentinel* run which referred to the many hardships endured by the participants, and the accompanying photographs go to prove that the reports of heavy going were

not exaggerated. Picture number 1 shows a stretch of road five miles out of Oshkosh. This is a fair sample of the mud and water encountered. In the second picture is shown a road washout; one of the riders may be seen throwing water on his engine to cool it.

LOCATING *That* PUZZLING "KNOCK" by the *Timely Tipster*

THIS is the time of year when motors that have given faithful service over all kinds of roads throughout the summer begin to develop little eccentricities that puzzle and annoy their owners. One of these kinks is likely to come in the form of a "knock," a mysterious click or a bump.

Unusual noises coming from the motor always indicate present or prospective trouble, and should be attended to at once. A light tapping is a sign of slightly premature ignition. Correct it by retarding the spark until the noise ceases. A violent knocking indicates looseness or breakage in some connection; in motors that have had considerable use the bearings may be worn, causing looseness of the crankshaft or connecting rod. Another cause of a violent knock is looseness of the flywheels on the shafts. This is not common. Before attempting adjustments necessitated by a knock always retard the ignition gradually to ascertain whether premature firing is causing the trouble.

A dull pounding in the cylinder may be caused by accumulated carbon; by having the plug points too far into the cylinder; by too rich a mixture or by premature combustion. Clicking noises indicate too much clearance between the valve stems and tappets. The clearance should be slightly less than 1/32 of an inch. A peculiar sharp bumping noise, difficult to describe, gives warning of a cylinder loose on the crankcase.



H. Conboy, of Alameda.

Conboy is one of the most enthusiastic motorcycle boosters in California.

TO DENVER AND RETURN.

COLUMBUS, Ohio.—Two Columbus motorcyclists, Joseph Miller and Jesse Allen, have arrived home after a trip to Denver, Col., lasting a little over three weeks. They rode Indian 7 h. machines. The boys suffered no engine or tire trouble during the entire journey. The roads were found to be in good condition with the exception of some of those in the state of Illinois. The boys left Columbus August 20 and returned September 12.

A SPARK PLUG WARNING.

"DON'T screw the spark plug into the cylinder too tight," says Emil Grossman, manufacturer of the Red Head spark plugs. "They only want to be tight enough to prevent the leakage of gas. If they are screwed in too tight it breaks the porcelain and ends their usefulness."

TED BURNAFORD, Benjamin Connor, Joseph Helfrich and E. B. Wagner, motorcyclists of Wilkesbarre, Pa., recently completed a 1,200-mile trip through Pennsylvania, New York, Delaware, Connecticut, Massachusetts and Rhode Island.

FRANK BAKER, rural mail carrier out of Bellevue, Ohio, says he has it on the other carriers. He rides a motorcycle and finishes his work in half the time his co-workers spend covering the routes with a horse and buggy.

FRED SCOTHORN and wife of Coffeyville, Kan., have just returned from a vacation which they spent on their motorcycle. They traveled over Oklahoma and part of Southern Kansas. The machine used was an American.

THE Kane Drug Company, of Coffeyville, Kan., has just purchased a 1912 chain-drive Excelsior motorcycle for use in the delivery department. They have been using a 1911 Excelsior machine.

TWO MERKEL TOURISTS.

DAVID EMERSON, of Berlin, and E. G. Gehring, of Meriden, Conn., who recently completed an enjoyable vacation tour on their Flying Merkel machines, appear in the accom-



panying photograph. They left Meriden and rode to Pittsfield and through the Berkshire hills to Albany, N. Y. Then they proceeded to Schenectady and along the Mohawk River to Little Falls; thence to Utica, Syracuse, Rochester and Buffalo. From Buffalo they proceeded along the shore of Lake Erie to Erie and thence to Cleveland. They spent a week in touring Ohio and finally visited the Flying Merkel factory in Middletown.

SAN DIEGO TO NEW YORK.

H. P. ARROWOOD, with L. J. Saunders as a tandem passenger, is en route on a motorcycle from San Diego, Cal., to New York city. They expect to reach New York in 30 days. The cross-continent trip will not be a new experience for Saunders, as he made a trip from the Atlantic coast to San Diego on the same machine last Spring. The route for the present trip will be to Los Angeles, Salt Lake City and Denver; thence to St. Louis, Omaha, Kansas City and Indianapolis. From there the route will be to Cleveland, Harrisburg, Philadelphia and then to New York.

IN San Francisco, Cal., eighteen motorcyclists were arrested in one afternoon recently for exceeding the speed limit, and a score of automobilists were given the same treatment.

BAKER'S DARING RIDE**Indianapolis Boy Forged Into Second Place on a Bare Rim in 100-Mile Race.**

INDIANAPOLIS, Ind., September 14.—Despite his desperate attempt to win the 100-mile race here this afternoon, Erwin G. Baker finished second to Frank Houff, of Terre Haute, who, like Baker, rode a racing Indian 7. Baker rode the last five miles of the 100-mile grind on a tireless back rim and brought the crowds of spectators to their feet cheering. The Indianapolis rider held the lead until the 95-mile mark was passed and then had to stop. His tire had blown out. His lead at that time over Houff was two miles, but while Baker was trying to get the tire to hold air Houff went into first place, and Creviston, of Marion, went into second.

Baker grew impatient, jerked the worn-out tire from his rear wheel and finished the race on the steel rim. He went in pursuit of Houff, who had gained more than a lap on him and

passed his rival once. He still had a mile to make up in order to win with just three miles of the race left to do it in, and the odds were too great. The best Baker could do was pass Creviston and gain second place. Houff finished the 100 miles in 1:44:43½, and Baker was fifty seconds behind. When Houff finished the race, it marked his second 100-mile victory this year, he having won the event at Terre Haute on July 4.

AN INTERNATIONAL WINNER.

DEVAY, a French rider, recently won the international motorcycle race held under the auspices of the Automobile club of Sarthe at Le Mans, France. The distance was 246 miles, which Devay covered in 15 hours 12 minutes 35 seconds, about 48 miles an hour.

ARRANGEMENTS are under way to hold motorcycle races in Watertown, N. Y., and should the attendance warrant it a series of events will be arranged.

**BIG RUN TO OAKLAND.**

THE most successful road program ever arranged by the Los Angeles M. C.—one of the pace-setters for big motorcycle doings on the Pacific Coast—was that covering the recent 1,000-mile trip to Oakland and return. When the Los Angeles riders arrived at the turning point they were given a rousing welcome by the Oakland motorcyclists, who escorted them to the clubrooms. There the ladies of the Oakland club served an excellent supper and everything possible was done to entertain the visitors. The next day was spent in riding about Oakland and visiting points of interest. After a stop-over of two nights and a day the Los Angeles squad took up the return trail along the inland route.

One of the accompanying photographs shows a group of the riders posing with the tire car which followed them throughout the trip to Oakland. The picture was taken in front of the checking station in Oakland, as was the other view, which shows several of the riders waiting to check in. The third rider from the right calls his machine "Gentle Jane" and has that name printed on his tank.





PATTERSON'S APPEAL

President Requests F. A. M. Commissioners to Work Untiringly for a Membership of 30,000 in 1913.

WITH a view of injecting official ginger into state and local commissioners of the F. A. M., President Patterson has prepared a letter announcing his policy as regards these branches of the organization work, and making clear his determination to bring about greater activity. He makes an appeal to present state commissioners to give their duties reasonable attention or vacate the office in favor of a rider who can and will make progress. The letter is substantially as follows:

"I recently looked over a list of F. A. M. state and local commissioners sent me, and I find that in the list of 39 state commissioners there have been only three new appointments during the last term. Before making any appointments of state commissioners I have asked them several questions: Are they willing to answer official letters promptly? Are they prepared to give the necessary time and attention to their duties? Are they willing to appoint a local commissioner in every county in their state where there are motorcyclists?

"In going into the list more deeply I found this note opposite a commissioner's name: 'Don't know whether he is a good official because he has never answered the letters I forwarded to him and has not appointed a local commissioner in his State.' There is something wrong when it is necessary to make a note of this kind.

"What is the matter with our State commissioners? Surely there is no excuse for such lethargy. If you are a commissioner and the office appeals to you get busy at once; if you can't do that be fair to yourself and the F. A. M. and resign so that a more active man may occupy the office. I have a letter from far-off New Mexico in mind. A boy from that section writes me that there are 'very few riders in this district, but I will get them all.' That boy is going to make good. He is going to get results because he believes in 'doing things.' In some instances, unfortunately, the state commissioner is a man who simply holds the office because he believes it is helping his business. All this must be changed. We want result getters. The chairman of the Membership Committee, the Board of Directors, the National Secretary and your President are anxious to help you. When you get a man into the ranks keep him there. Give him some attention. Keep tab on him.

"We want every rider who joins to 'stay joined.' To this end I am anxious to hear from a lot of riders throughout the country who are willing to accept appointments as State or local commissioners. We need a capable official in every county in each State.

We believe the motorcycle game is still in its infancy, and we hope to build it up until the old parent won't know the child. The F. A. M. and the factory folks must co-operate; everybody must work. If we start on this basis we are bound to get results. I have set the membership mark at 30,000 for next year, and feel sure that we will reach it. We are going to make many changes in the list of State commissioners, and this letter is intended to call the attention of F. A. M. workers to our policy."

PLENTY OF VIM IN "ZIM."

NOT long ago during a two-minute lull in the boosting campaign he is waging for Hagstrom products, President Patterson, the F. A. M. in general, good roads and a few other projects, P. E. Zimmerman, of Lindsborg, Kan., found time to pose for the photograph which is reproduced below. "Zim"—he uses the other two syllables only on state occasions—is general manager for the Hagstrom



Bros. Manufacturing Company, in Lindsborg, and is also local F. A. M. commissioner and newly-elected vice-president of the Kansas Short Grass Club. From all of which it will be inferred that he is about as active a motorcycle live wire as ever sizzled in western territory; and the inference will be correct. He was one of the original Patterson boosters and is now a tireless worker for the upbuilding of the Federation in Kansas.

J. E. Spann and T. Moreland Caldwell, of Amarillo, Texas, are touring through Colorado on their motorcycles.

CANADIAN GOOD WILL

President Spencer, of Dominion Association Extends Hand of Fellowship to the F. A. M.

SOON after taking up his duties as president of the F. A. M., Doctor Patterson addressed a letter to President K. R. Spencer, of the Canadian Motorcyclists' Association expressing the good will of the Federation toward the recently organized Dominion body and inviting Canadian motorcyclists to take advantage of F. A. M. touring privileges when in the States. In reply President Spencer forwarded the following letter to President Patterson:

"Your letter of greetings to the Canadian Association has just been forwarded to the writer. I may say, speaking personally and on behalf of the board of directors and the members generally, that we reciprocate the very hearty greetings of the F. A. M. and feel proud to claim as our friends an organization as splendid as your own.

"The rapid advance of the Canadian Association has been due to a very great extent to the hearty support and friendliness shown by Dr. Thornley and Dr. Gibson; nor must we forget Mr. Hamilton or Mr. Sauer's early work, and we feel that with your good self in the lead, as at present, our friendship must assume even greater proportions.

"We thank you for your invitation to make use of the Federation privileges in touring the United States. We believe that there will be a number of riders who will accept your invitation and we also trust to have the pleasure of entertaining some of your tourists in this country.

"We are very pleased indeed, while in Columbus, to feel such a warm and hearty handshake as that extended to our official visiting your annual convention, and we herewith extend to you our invitation, that you attend the next national meeting of the Canadian Association of which we will forward you further information later. Would be very much pleased to have Dr. Thornley and Dr. Gibson and any other members or officers that are able to come."

Upon receipt of this communication President Patterson issued the following letter for general circulation:

"It will be noted in the letter forwarded by President Spencer of the Canadian Motorcyclists' Association that the Dominion riders have a most friendly feeling toward us, and in turn I think we should avail ourselves of every opportunity to assist Canadian riders who may be touring in the States. There are good roads and many points of interest on both sides of the line, and everything possible should be done to encourage a feeling of fellowship and good will. I trust that Dominion riders will have every possible courtesy extended to them when in our territory."

AMONG THE CLUBS

A UTICA OUTING.

ABOUT thirty members of the Utica (N. Y.) Motorcycle Club recently participated in a run to Saratoga Springs. They started at 7 o'clock Sunday morning, with symptoms of a rain storm very evident. By the time they reached the first control the storm became a reality and it rained on and off for the rest of the day. Long before Saratoga was reached seven of the tandem riders were obliged to abandon their machines and continue in an automobile. Despite the hardships contended with, the riders were all glad they made the trip and they are planning a series of such runs for next season.

QUINCY CLUB ORGANIZED.

WITH eighteen enthusiastic charter members the recently organized Quincy (Ill.) Motorcycle Club has started a busy career. The first meeting was held in the Chamber of Commerce rooms and officers elected were as follows: Joseph Esler, president; Frank Kathmann, vice-president; Carl Futterer, secretary; Motorcycle Mike Menke, treasurer; Joseph O'Neill, sergeant-at-arms; Oscar Kathmann, road captain and Albion Smith, lieutenant.

BUCKS COUNTY CLUB.

A MEETING was held at Newton, Pa., recently to perfect the organization of the Bucks County Automobile and Motorcycle Club with an enrollment of nearly fifty members. One of the objects of the association is to encourage the rebuilding of the roads in the county which are in a very bad condition. It was decided to fix the initiation fee at \$1 with annual dues as follows: Auto and motorcycle owners \$1.50, other members \$1. Meetings will be held every second Thursday.

SAGINAW OFFICERS.

AT a recent meeting of the Saginaw (Mich.) M. C. the following officers were elected: Edward L. Wissmueller, president; Norman Deshone, vice-president; Arthur Bohnhoff, secretary; Louie A. Beierwalters, treasurer.

SEVERAL members of the Middletown (Ohio) Motorcycle Club recently returned to their home town after having toured through Ohio, Indiana and Kentucky.

A NUMBER of motorcyclists of Chambersburg, Pa., recently made a Sunday run to Winchester. At Greencastle they were met by a dozen or more Waynesboro riders.

THERE are over 200 motorcyclists in Mobile, Ala., who are enthusiastic about forming a local club, and it is expected that some definite action will be taken soon.

CLOSE FINISH AT BALTIMORE

Members of Maryland M. C. Covered 125-Mile Route with Warmbold and Frank Setting the Pace.

BALTIMORE, Md.—After a good deal of close figuring the committee in charge of the first sociability run of the Maryland M. C., held on Sunday, September 1, has announced the winners, and at the last weekly meeting the prizes were distributed. First honors were divided between George Warmbold and Charles Frank. The average time for the 125-mile run was 7 hours and 52 minutes, while Warmbold's time was 7:49½, and Frank's 7:54½. The limit for the run was ten hours and nearly all of the fifty starters finished within that time. Some, however, proved bad guessers and they were hopelessly out of the running.

The plan of some of the boys was knocked in the head. They had arranged to ride in pairs and time themselves, but their scheme received a jolt when they arrived at the clubhouse and discovered that after drawing odd and even numbers the holders of each kind were sent off in opposite directions. The result was that no one had any idea who would win and their calculations went sky high.

The other prize winners were: William Wood, third, 7:48½; J. N. Carroll, Jr., fourth, 7:58; J. Hannibal, fifth, 7:44; J. W. Owen, sixth, 7:40; W. S. Fisher, seventh, 7:39; Sam Ambach, eighth, 8:07; Charles Kirwan, ninth, 7:37.

So pleased are the members with the success of the secret time run that talk has already been started of holding a 250-mile endurance run from here to Philadelphia in the near future. On Sunday, September 15, the boys went on a triangular run to Westminster, then across country to Ridgeville for dinner, and then down the Frederick pike, home, covering eighty miles. The race for the diamond medal offered for the best attendance on runs is a close one, with Nelson Johnson in the lead.

THE Rochester (N. Y.) Motorcycle Club has voted to assist in carrying the message through their section of the State when the F. A. M. conducts the ocean-to-ocean relay race which it is now planning.

THE Harley-Davidson Motorcycle Club, of Philadelphia, Pa., recently placed a handsome player piano in the clubrooms. Four new members were taken in at the last meeting.

MEMBERS of the Berks Motorcycle Club, of Reading, Pa., recently made a trip to Atlantic City and Ocean Grove, N. J.

A MOTORCYCLE club was recently organized in Yakima, Wash. It will be affiliated with the F. A. M.

HELD A CITY RUN.

THE first city run of the season was held in Indianapolis on September 8 by the Indianapolis Motorcycle Club. The riders, after gathering at the monument, started on a tour of the city and picked up more motorcyclists as they traveled. The tour covered about fifty miles. Carl Sneider was tourmaster. He took the riders through all of the city parks of note, and pulled off an impromptu hill-climb at "Crow's Nest," near Riverside Park. The Indianapolis Motorcycle Club is settled in permanent quarters downtown, at 322 N. Illinois street. The dealers of the city are subscribing to a fund which is expected to reach \$200, and which is to be used for furnishing the new clubhouse. There are five rooms and a bath in the quarters, and the location is a good one.

FIGHTING LICENSE CASE.

NEWARK, Ohio, Sept. 16.—Newark motorcycle riders are interested in the outcome of a case which will be tried in the county courts here soon in which the city is made defendant and L. W. Thomas, a motorcyclist, plaintiff. Thomas was charged with violation of the ordinance requiring motorcycles to bear numbered license tags. He alleges that the ordinance is invalid. The measure provides for the payment of \$1 for the license fee and stipulates that the owner or rider is to receive two tags, "one to be attached to each side of the machine." Thomas alleges that the city gives but one tag (which is a fact) while the ordinance provides for two. He was fined \$10 and costs.

ST. AUGUSTINE CLUB.

A NEW motorcycle club was recently organized in St. Augustine, Fla., under the name of the St. Augustine M. C. More than twenty-five members were enlisted and the following officers were elected: R. C. Stephens, president; H. W. House, vice-president; L. R. Buckner, secretary; R. B. Merseve, treasurer. L. R. Buckner offered a room over his garage for a meeting place, and regular sessions will be held there.

ANOTHER CALIFORNIA CLUB.

AT a meeting of about 50 motorcycle riders of Orange County, Cal., held at the Bridwell Motorcycle shop, it was decided to organize the Orange County Motorcycle Club. A committee was appointed to outline a number of runs.

A SUNDAY RUN.

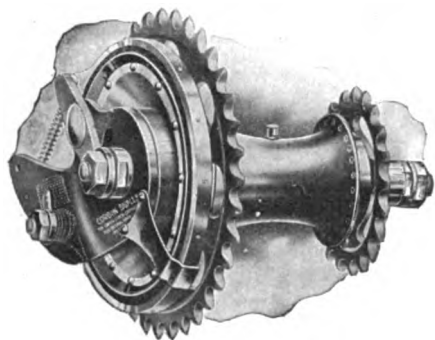
A SUNDAY run to Beaver Dam, Waupun and Juneau, was recently made by the motorcyclists of Madison, Wis., under the auspices of the Four Lakes M. C.

MANUFACTURERS

IMPROVED CORBIN MODEL.

THE design and construction of the Corbin brake have kept pace with the gradual development of the motorcycle to its present efficient state. Over 50 per cent. of all the motorcycles manufactured in America today are equipped with the Corbin brake.

The 1913 model of this well known brake



shows some interesting improvements over that of 1912. For instance, the arm connecting band has been improved. On one end of this band are two projections forming a nut lock which securely holds the nut and prevents its turning or jarring loose. The device is now much easier to attach.

Another improvement is a bracket attached to the lower side of the brake arm. The object of this is to keep the brake band from dragging on the drum or sagging when expanded. This feature also prevents loss of power or overheating.

GOODRICH PLANT EXTENSIONS.

THE growing popularity of Goodrich tires has caused an era of factory expansion at the already extensive plant of the B. F. Goodrich Company, in Akron, O. Several more acres of floor space will be added by the time the snow flies. Work has already been started on a six-story office building which, with a two-story addition to the present quarters, it is hoped will be adequate for handling the rapidly growing business interests of the concern. The structure will be of steel and concrete, faced with brick and finished in the most modern style. A new factory building, also six stories high, is rapidly nearing completion. This big addition is 270 feet long by 157 feet wide and contains 6½ acres of floor space. In the meantime, despite the lateness of the season, the factory is working day and night in order to keep up with the demand for its products.

MARVEL PLANT MOVED.

THE MARVEL CARBURETER COMPANY, formerly located in Indianapolis, Ind., has moved its entire plant to Flint, Mich. Some of the Indianapolis employees are continuing with them in the new location. Increased space and improved facilities throughout the plant will enable the firm to increase its carbureter output by about one-third for the 1913 season. Advance orders are already being received.

TO SELL PIERCE PLANT

Property of Buffalo Company Will Be Disposed of October 2—Orders Filled in Meantime.

A MEETING of the creditors of the Pierce Cycle Co. of Buffalo, N. Y., was held in Buffalo on September 12, before Barber S. Conable, referee in bankruptcy. In order to settle the affairs of the company it is necessary that the Pierce plant be sold and the court has set October 2 as the date for a public sale. The sale will take place at the Pierce factory, 6-22 Hanover street, Buffalo.

The history of the Pierce Cycle Company is more than ordinarily interesting. The company had its origin as far back as 1865, when the late George N. Pierce entered the manufacturing field with a refrigerator line. In 1890 Mr. Pierce began the manufacture of bicycles under the name of the George N. Pierce Co. The success of the company was marked. It was one of the few companies that did not join the trust, and its bicycle line eventually became and is yet one of the standard American products.

It was but natural that the Pierce interests should enter the automobile field, and this occurred in 1900. The success of Pierce Motorettes and Stanhopes made possible the high-powered Arrow motor-cars. In 1906 the business had grown to such volume that the bicycle and automobile interests had to be separated. The bicycle end of the business was continued by Mr. Pierce, and associated under the firm name of The Pierce Cycle Company. In 1908 the first American-made four-cylinder motorcycle was produced by the company and two years later came the single-cylinder model.

The cost of developing the motorcycle business was enormous, and during 1910 the company became financially involved; this precipitated a receivership on August 10, 1910. For some time the plant was operated by L. P. Hancock and M. W. Bennett as joint receivers. Later Mr. Hancock was made sole trustee.

During the term of the receivership the business of the company has increased 50 per cent. The reputation of Pierce bicycles, long since established, has been carefully conserved and the motorcycles, little known in 1910, are now sold in all parts of the world, and are everywhere famous for their excellence of design and construction. Pierce bicycles and motorcycles are today sold in all parts of the United States and in 17 foreign countries. The company has 800 established dealer agents, all of whom will undoubtedly continue to represent Pierce goods in the future.

The Pierce plant will undoubtedly be sold to an organization amply capitalized to continue the manufacture of both bicycles and

motorcycles. It will probably be a matter of only three or four weeks before active production will be resumed. The property to be disposed of consists of machinery, finished and unfinished stock, factory equipment, fixtures, etc. The inventory value is close to \$300,000. The manufacturing and selling organizations are intact and will undoubtedly continue under the new control. In view of the standard of its product and the well-known name of the company, it is a great opportunity for those desiring to enter a growing industry. As to the details of the sale, any information will be given by L. P. Hancock, trustee, No. 18 Hanover street, Buffalo, N. Y.

TO FILL PIERCE ORDERS.

PENDING the sale of the property of the Pierce Cycle Company, on October 2, the Court has empowered L. P. Hancock, trustee, to fill orders for motorcycles, bicycles and parts thereof. This will enable Pierce agents to continue their business without interruption.



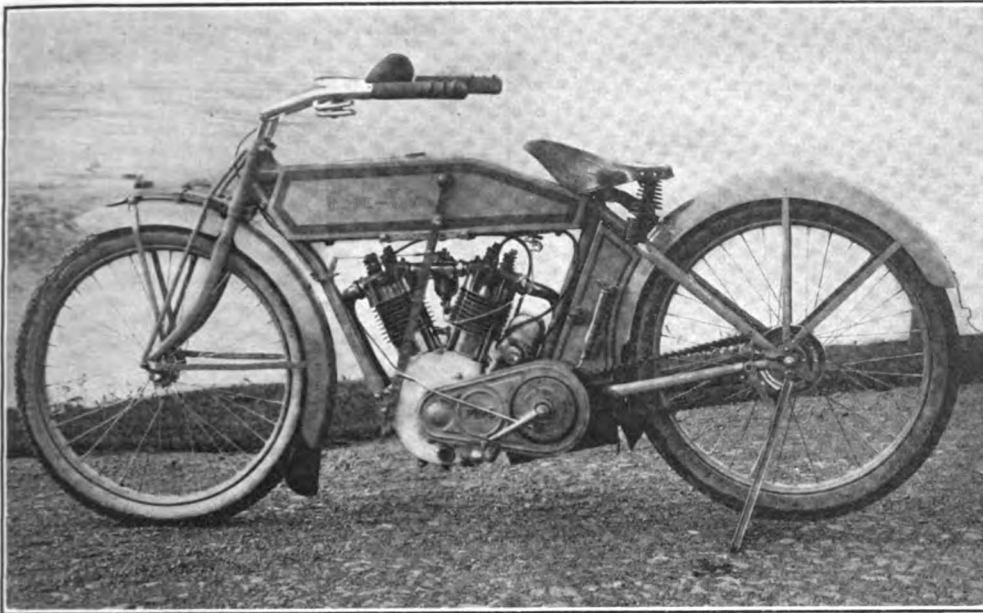
L. C. Van Buren, who will establish Goodyear Branch in England.

NEW HAGSTROM LINER.

THE latest product of the Hagstrom Bros. Mfg. Co., of Lindsborg, Kan., is a self-vulcanizing inner-liner, which is a godsend to the motorist living in a rural community, and likewise to the tourist, as it can be inserted on the road.

In towns of 5,000 to 10,000 population in the West and Central West, it is almost impossible to procure the kind of cement which best serves the purpose of cementing inner-liners to the casing. The Hagstrom self-vulcanizing inner-liner is prepared with a coating of pure raw rubber cement of the highest quality, and it is only necessary to wash off the soapstone with gasoline and wash out the casing, inserting the liner after allowing a short time to dry. The ordinary heat produced by the tires while in motion causes this to vulcanize.

NEW TWIN FILLS OUT THE POPE LINE



MOTORCYCLE ILLUSTRATED is able to publish this week an advance photograph of the new Pope twin, a forthcoming production of The Pope Manufacturing Company, of Hartford, Conn. With the advent of this model into the world of motorcycles still another manufacturer will have rounded out a complete line of machines, finishing off with a two-cylinder model. The Pope line of motorcycles for 1913 will consist of three models, each filling a distinct field of its own. Model H, the first to be put on the market and which met with instant success, will be continued with an increased output, and there will also be a large production of Model K, more recently announced, a machine with a "big four" horsepower. The new twin will be a fast and powerful machine. The photograph gives an excellent idea of the latest Pope mechanical

construction, sturdy as well as attractive.

The factory at Westfield, with its enormous floor space and large complement of the most improved machinery, is in a great state of activity. There will be a large increase over last season's output, but as always, this company will proceed on a sound and conservative basis. It is stated by L. D. Harden, manager of the motorcycle department, that the twin will be ready for shipment from the factory in good time for the rush trade of 1913. Already many dealers have visited the factory and closed contracts for the new year. These have had an opportunity to see the new machine and their enthusiasm over it has been so great that they have placed large orders. Still others, who have learned of the new product by rumor, have signified their desire to close for the coming season.

TOURISTS AT INDIAN FACTORY.

DURING July and August no less than six hundred tourists stopped at the Indian factory, in Springfield, Mass., which is located on the direct road between Boston and Albany and Boston and New York, and have kept the company's force of guides busy all of the time. This is an average of seventy-five each week, which demonstrates that the company's slogan, "Count the Indians on the Road," is not without weight.

Many tourists, after inspecting the different departments in the factory, have been amazed at the number of operations necessary to make the Indian. Others stopped off expecting to see a plant which they would be able to inspect completely in about half an hour, but instead of this they have walked until they became tired, and there still remained some departments which they did not visit. There is hardly any time during the day that at least one of the guides is not accompanying a party through the factory. The number of men employed, 1,200, immediately interests the curious tourist.

The tourists are not confined to any certain territory, coming from all parts of New England and the Middle West, and many times the visitors are from the Pacific Coast. In glancing over the register it is seen that the New

England States are well represented, and the list also includes riders from California, Colorado, Nevada, Nebraska, Utah, Illinois, Ohio, Pennsylvania, New Jersey, New York, Delaware and Maryland. The weather makes little difference in the number of visitors to the factory; tourists often put their machines under cover and take advantage of a trip to the factory while it is raining. In good weather there is a daily string of machines in front of the factory, belonging to incoming and outgoing tourists.

Tourists visiting the factory find the guides most courteous, and should they wish to remove the sand and grit which accumulate while on the road they are escorted to a laboratory where all the necessary things are at hand. Oftentimes tourists come in such large numbers that it becomes necessary for them to wait in the reception room for one of the guides to return from a trip in the factory. The reception room is equipped with all the latest literature pertaining to the Indian motorcycle, and the tourists never fail to ask for a few pamphlets which contain valuable information.

Aside from the various forms of literature tourists are presented with pennants to fly from their machines, and should they desire parts of any description they are served as promptly as possible.

NEWARK MOTORCYCLE SHOW.

NEWARK, N. J., with about 600 motorcyclists, will probably have an independent show for the motor-driven single-trackers during the coming winter. Such a movement was taken up last year but there was not sufficient time in which to develop the plans, and the local dealers are making an early start this year in order that their project need not be side-tracked. They argue that enough dealers from Newark and neighboring towns can be interested to make an excellent showing and that motorcycling interest in the vicinity justifies the undertaking.

TRIUMPH CATALOG.

TYPOGRAPHICALLY attractive, well illustrated and straightforward in its descriptive matter, the first catalog of the Triumph Manufacturing Company, of Detroit, Mich., is a booklet calculated to give the new arrival in the motorcycle field a favorable introduction. It is made up of 20 pages, each of which has something of interest to tell veterans as well as prospective recruits. An application to the Triumph Company at 51-55 East Woodbridge street, Detroit, will bring one of the catalogs by return mail.

NEW MERKEL HUSTLERS.

CHAS. R. MILLER, for a number of years superintendent of The Miami Cycle & Mfg. Co., in Middletown, Ohio, tendered his resignation last week. Mr. Miller's going was a most amicable departure, as he desired to take a long coveted rest, following which he will go into business for himself. On his retiring the employees presented their former superintendent with a diamond ring.

Mr. Miller's successor is C. J. Kester, who left a responsible position with the Flanders Manufacturing Co., of Chelsea, Mich., to assume the superintendency of the big Miami plant. Mr. Kester is a thoroughly practical

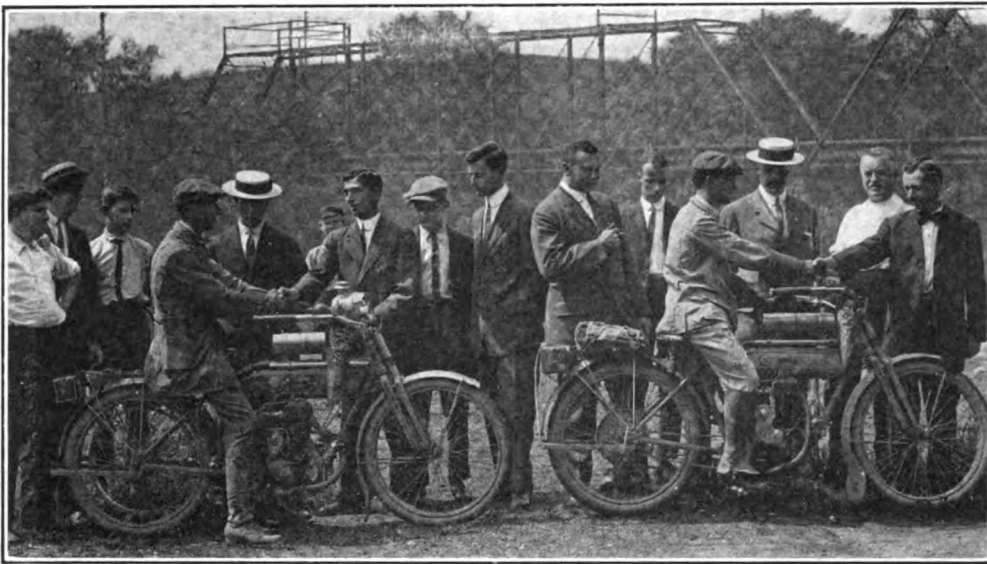


C. J. Kester.

man, of 21 years' mechanical experience, and knows bicycle and motorcycle manufacture from raw material to finished product.

Another recent acquisition is A. C. Bryan, who will fill the newly-created office of production engineer. Mr. Bryan, until recently, occupied a similar position with the General Motor Co., and was formerly with The Flanders Mfg. Co. He is a college graduate, has taken his degree in both mechanical and electrical engineering.

Arthur Graves, one of the best known tool foremen in the country, is also a new acquisition to the Miami staff.



Testers Deysher and Dunkle Ready to Try Out New R-S. Singles.

MADE SEVERE TEST

New Reading Standard Singles on Trial Run Encountered Everything from Sand to Floods.



TWO testers, James Dunkle and J. S. Deysher, were sent out recently by the Reading Standard Company, of Reading, Pa., on what was undoubtedly one of the most severe trial trips to which a single cylinder machine has been subjected in the East. The tour was made for the purpose of testing two of the company's 1913 4 h. singles, and the route was mapped by President A. S. Deysher in an automobile, his aim being to give the testers a full-fledged endurance run. The riders headed westward for Pittsburgh via York, Chambersburg, McConnellsburg and Bedford to Greensburg and thence to Pittsburgh. On their return they took a northern route, retracing as far as Greensburg and going thence to Tyrone, Blaisville, through Pine Flats to Altoona, from Altoona to Williamsport and thence to Reading.

The testers admit that President Deysher made no mistake in outlining the route if he was seeking poor roads. They believe it would be impossible to map a more severe trip in Pennsylvania. In the vicinity of McConnellsville hills three and four miles long were encountered and some of them have sandy stretches, an unusual condition for mountain roads. Near Pine Flats and on the way to Altoona the roads were next to impassable. Heavy rains had left them little more than quagmires.

The riders gave a satisfactory report on the performance of their machines on their return. They had no engine trouble and were not compelled to walk or push their machines up any of the hills. They state, however, that no single-cylinder machine ever made could climb the hills referred to without being sorely tried. One of the riders broke a cable of his band brake and it was necessary to remove the rear wheel to make repairs. This was the only adjustment necessary on the trip.

The testers were not trying for a speed record, but considering the condition of the roads they made good time, covering the 611 miles in 42 riding hours. Seven and a half gallons of gasoline and five pints of oil were required for each machine, an average of about 81½ miles to a gallon of fuel.

WITH COLUMBUS DEALERS.

COLUMBUS, O.—With favorable weather and touring conditions about the central part of the state the sales of the local dealers are soaring again. Chas. E. Barr, local distributor for the Indian, reports several sales this week with the prospects of many more in the near future.

A. C. Edwards, Central Ohio agent for the Flying Merkel, has taken the agency for the De Luxe motorcycle also.

The Goodyear Tire and Rubber Company moved from its old quarters at the corner of Gay and Fourth streets recently, to the new three-story fireproof building at the corner of Fourth and Elm streets. R. A. White is local manager.

J. Otto Tressmer, former assistant sales manager for the Barr Motorcycle Co., has left the employ of the above company to take up work along the same lines for the Hendee Manufacturing Co., at Springfield, Mass.

Articles of incorporation were issued recently to the Pharis Tire and Rubber Co., dealer in motorcycle, bicycle and automobile tires, and rubber specialties.

BIRKENBACH IMPROVEMENTS.

COLUMBUS, Ohio.—L. P. Birkenbach, who conducts the central Ohio agency for the Thor, plans extensive changes in his establishment at 17 North Fourth street. He will take out the partition between the present salesroom and the repair shop, doubling the sales space. Later a large addition will be built in the rear for an up-to-date repair shop and garage. The changes will make the place one of the most modern in central Ohio.

AFTER NEW MEMBERS.

AS the result of a recent banquet and smoker of the Sandusky (Ohio) M. C. an active membership campaign has been started and eleven new members have been enlisted. Permanent clubrooms have been secured and the riders are planning for a busy social season during the winter.

MAKING RAPID PROGRESS

Canadian Association Takes Up Show Plans, Names Commissioners and Arranges for Its Annual Assembly.

TORONTO, Can.—The Canadian Motorcyclists' Association is becoming quite the lusty lad of the motorcycle governing bodies of the world. Organized only a few short months ago, it is already attacking the big problems of the game in the Dominion and a fine start is being made in the establishment of correct conditions in all parts of the country.

The directors of the association confabbed at a special meeting held in Toronto on September 8, when several urgent details were worked out. Several important recommendations were brought in for presentation at the annual assembly of the association, which is to be held in Toronto about December 15, chief among which was a motion favoring the adoption of the new F. A. M. rider classifications, to prevent any clashes between the two federations on this question.

The following district commissioners were appointed: British Columbia, G. W. Lillie, Victoria; Alberta, Roy McKinnon, Calgary; Manitoba, J. M. Moorhouse, Winnipeg.

A press committee was created and W. M. Gladish, of Toronto, was appointed the first chairman with power to work out the development of a national press service.

Dr. Thornley, chairman of the F. A. M. competition committee, was made an honorary member of the association in recognition of his invaluable advice and assistance in the formation of the Dominion organization.

An official emblem for the association, in the form of a twin cylinder engine design, surmounted by a beaver, was officially adopted. A form of a certificate for affiliated clubs and district commissioners was also decided upon.

A motorcycle show committee, composed of F. A. O. Johnston, Alex McLean and W. M. Gladish, of Toronto, was created to work up interest among the motorcycle manufacturers for the coming Toronto show to be held next February. It is planned to give full publicity to this event, as well as the convention of the association, in order to make both occasions something worth while for the Canadian trade and riders. The C. M. A. will have special headquarters at the coming show for the dissemination of C. M. A. particulars.

A STRONG COMBINATION.

F. D. FREEMAN, formerly employed by the Aurora Automatic Machinery Company, and for some time in charge of this firm's retail motorcycle sales in Cook County, Ill., is now associated with H. T. Roberts, who recently entered the field as a manufacturers' agent with headquarters at 538 South Dearborn street, Chicago. Roberts handles the lines of nine factories devoted exclusively to motorcycle products, and Freeman will devote himself from now on to boosting this line-up of standard accessories. He joined Roberts on September 1 and began his sales campaign at once.

NEW MILLER BRANCH.

ANNOUNCEMENT is made that the branch establishment of Charles E. Miller in Atlanta, Ga., will be moved in a few days to a new building at the corner of Harris and Peachtree streets, where one of the most thoroughly equipped motor supply stores in the South will be conducted.

NORTHERN ONTARIO "ROADS."

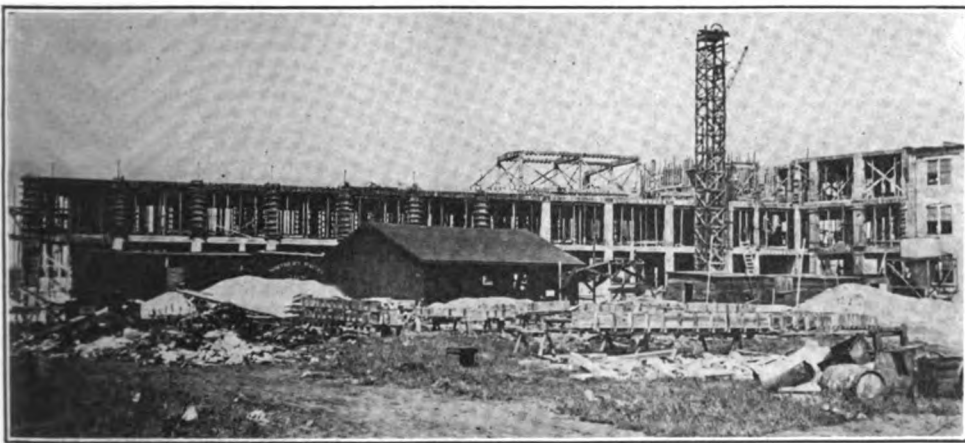
THE fate of a transcontinental automobilist who essayed to cross Canada from Halifax to Vancouver is an example of the experience which Harry Humphries and wife, the globe-girdling motorcyclists, may be confronted with when they attempt to "see" the Dominion. The motorist, Thomas F. Wibby, discovered good roads, comparatively speaking, in Eastern Canada until he struck North Bay, Ontario. In this section his machine broke down twice on the sand, mud and corduroy "highways," and finally, when the roads terminated altogether, Wibby was compelled to ship his car by train across Northern Ontario.



"Genial" Houston, who is traveling Minnesota and the Dakotas for the Minneapolis Motorcycle Co.

COFFMAN'S NEW LINES.

A. B. COFFMAN, who recently resigned as vice-president and sales manager of the Consolidated Mfg. Co., of Toledo, announces that he has arranged for the exclusive sale of Morrow bicycle coaster brakes and hubs, made by the Eclipse Machine Company, of Elmira, N. Y., and that he will also handle sales of the American Wood Rim Company's full line of bicycle wood rims and automobile steering wheels. Mr. Coffman may be addressed for the present at 120 Tenth street, Toledo, Ohio.



NEW MERKEL ADDITION.

THE accompanying photograph affords an excellent view of the new addition to the plant of the Miami Cycle & Manufacturing Co., in Middletown, Ohio. On the extreme right

can be seen the old factory, which is joined by the new structure. Two stories of the extension are shown in the picture and the third is now being put on. The section adjoining the old factory will be four stories in height.



NEW H-D FACTORY.

IN the accompanying photograph is shown the new Harley-Davidson factory, embracing 90,000 square feet of floor space, which will permit of doubling the company's output for the 1913 season. All five floors and the basement of the new structure are now in use. A building adjoining this factory is now being torn down to make way for another five-story extension along the same architectural lines as the one shown in the photograph.

The Harley-Davidson company's use of pressed steel parts in motorcycle construction has been so highly successful that the firm is now adding to the equipment in this department. Another big press, weighing 33,000 pounds, has been ordered and will be in position in a week or two. This latest addition to the family of Harley-Davidson presses will be capable of delivering a stroke of 200 tons.

PITY THE POOR TORONTOAN.

LO, the unlucky motorcyclist of Toronto! On Friday, September 13, Magistrate Kingsford, of Toronto, issued a declaration that in future no speeding cases would be settled out of court, and further declared that, as he believed that the offenses of the riders and autoists were becoming far too common, he would live up to the full letter of the law by which he could confiscate a machine for a period of three months on the third offense.

The range of other penalties which he will impose is: A fine of \$50 or one week's imprisonment or both, for the first charge; \$10 or one month's imprisonment or both, for the second offense; and in the third case, imprisonment not to exceed three months.

A fine feature of the law is that when machines are impounded they may be placed where the magistrate directs and charges for storage or care of the machine can be made for the full time.



W. D. Freeman.

NOTES FROM BAKERSFIELD.

CHARLES P. CLARK recently resigned as president of the Bakersfield (Cal.) M. C., as he could not devote sufficient time to the office. A. Hansen was elected as his successor.

W. A. Park believes he should have an interest in a few jails up the valley. He was arrested four times on a trip to Fresno recently and fined \$10 each time.

The Bakersfield Club held a tandem run to Fresno a short time ago, and as the distance is something like 228 miles, the affair speaks well for the endurance of the Ladies.

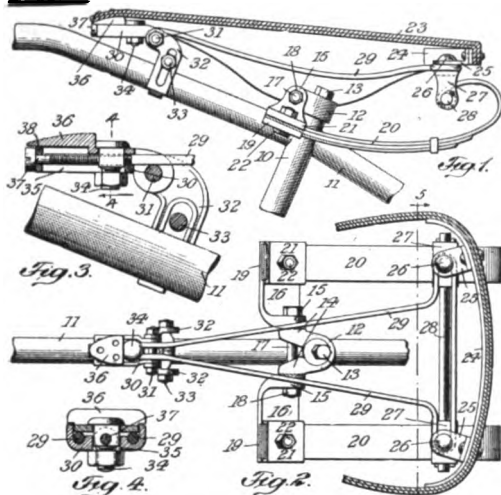
Jules Berges and D. Stoekel have formed a partnership and intend to open an up-to-date motorcycle shop. They are both excellent mechanics and have secured the agencies for M. M. and P. E. M. motorcycles. Dealers in Bakersfield look for big 1913 sales.

PATENTS

Two New Mesinger Saddles;
Tandem Attachments; A
Unique Three-Wheeler; Valve
Spring-Remover and Tail Light

NEW MESINGER SADDLES.

TWO saddle patents, outlining improvements of prime interest to motorcyclists, have recently been obtained by Frederick Mesinger, of the H. & F. Mesinger



Company, of New York City. Both saddles are unique in that they dispense with the standard coil springs at the rear and utilize ingeniously arranged leaf springs. Patent No. 1,036,877, issued to Mr. Mesinger on August 27, is described as follows:

The saddle post 10 is straddled by a clamp 12 resting on a shoulder of the post and fastened by a bolt 13. Figure 1 shows the clamp fitted to an upright post, but it may be turned at right angles for use with a gooseneck post. The clamp is made in the form of a yoke, and its shanks are provided with radial grooves to constitute a pair of friction jaws. These jaws are engaged by correspondingly grooved jaws 15 formed on the upturned ends of a pair of longitudinal members 16 (in top view). A bolt 17 pivotally connects the arms to the yoke, while by slackening the nut 18 the arms may be swung backward or forward to adjust the height of the saddle. Each arm has at its outer end a recessed seat 19, adapted to receive the forward end of a flat cradle spring 20, which is fastened to the arm by a flanged cap and bolt. The springs 20 are intended to be made up of several leaves in the front, diminishing toward the back, where but a single leaf may be provided. The rear end of each spring is bow-shaped and secured to the back of the saddle, as shown in the side view.

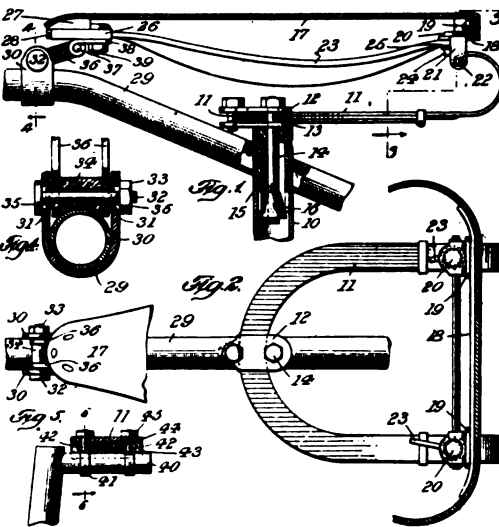
The two forward ends of the stay spring 29 are seated within a grooved plate 30 pivoted by a bolt 31 to a pair of slotted L-shaped brackets 32, which are adjustably secured to the frame 11 by the bolt 33. This arrangement eliminates side-sway.

The saddle top is provided at its back with a depending flange to the inner face of which there is attached a curved cantle 24.

This cantle is provided with a pair of forwardly extending apertured lugs 25 from which depend a pair of bolts 26. These bolts carry at their lower ends a pair of yokes 27, each of said yokes being adapted for the reception of the rear end of one of the cradle springs 20. The rear eye-shaped ends of these springs encompass a pin 28 passing through both of the yokes which thus constitute bearings for said pin.

The second new Mesinger saddle, illustrated herewith, for which a patent was issued on September 3 last, is constructed along equally distinctive lines.

To the saddle post 10 is secured a cradle spring 11 of the peculiar shape more fully shown in Fig. 2. The spring is U-shaped in plan, with its two shanks coiled upwardly and forwardly at their free ends. The body of the spring may be composed of a number of superimposed leaves at its forward portion, while its rear or vertically curved portions may be composed of a single leaf. Means are provided for securing the spring at its center to post 10. The form of clamp plates 12, 13 connected by an expansion bolt 14 that extends into a slotted sleeve 15 or post 10 and carries a coniform nut 16. The rear ends of the spring 11 are connected to the back of the saddle top 17 by means of a cantle 18 to which a pair of flanged lugs 19 are riveted. Each of these lugs is apertured for the reception of a depending bolt 20 arranged between the cheeks of a yoke 21 depending from lug 19. Through these cheeks passes a common horizontal pin 22, which thus bridges the yokes, and around which the two shanks of spring 11 are coiled. The saddle is provided with two stay springs 23, each coiled at its rear end around one of the bolts 20. The front ends of the stay springs are secured to a plate 26 adjustably connected to the nose piece 27 by set screw 28. Plate 26 is so secured to the cycle frame 29 that a

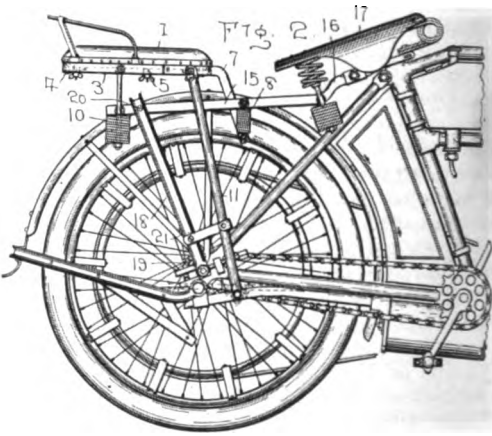


free play at the forward ends of springs 23 is insured and that at the same time the play may be accurately regulated. For this purpose frame 29 is straddled by a flexible strap 30 which is apertured as at 31 for the accommodation of a bolt 32. This bolt passes through a cylindrical sleeve 34 which is partly concaved to closely hug frame 29. It will be seen that links 36 permit a free play of the stay spring, so that great resiliency at the front of the saddle is insured.

It is argued for both saddles that they combine to an unusual degree the desirable qualities of strength and resiliency and that they afford the lowest possible riding position on all standard machines.

CIRCULAR TANDEM SEAT.

A TANDEM seat embodying several new features is covered by a recently issued patent taken out by Teunis DeYoung, Jr., of

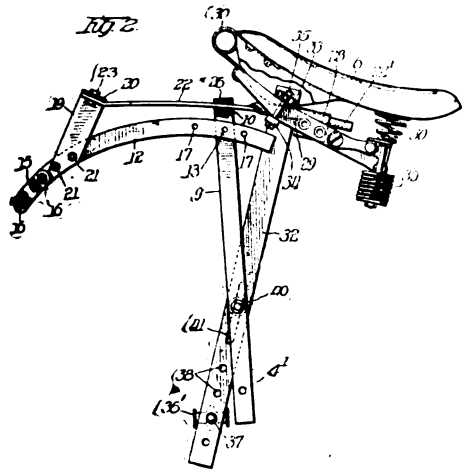


South Holland, Ill. The seat proper is circular in shape and has a railing extending part way round it. With reference to Fig. 2, the seat is held in position on the supporting ring 3 by means of small clamps 4, carried upon the under side and projecting out over the ring. Secured to the ring and projecting forward and downward are the arms 7, the ends of which are fastened to the shock-absorbing springs 8. Also secured to the ring 3 are the upper ends of the supporting rods 9 which pass through the rear shock-absorbing springs 10 and have their lower ends secured to the lower ends of the springs. The guide rods 11 also have their upper ends fastened to the ring 3 and the lower ends of these rods are turned outward to form footrests. On the out-turned end of the guide on the right side of the machine may be fitted a small platform or footrest for side-saddle riding. The seat proper may be so shifted on the ring 3 that the passenger faces forward or to either side.

ANOTHER TANDEM DEVICE.

A NOTHER improved tandem seat covered by a recent patent is the invention of Virgil W. Phillips, of Chicago. As shown in

the illustration, a U-shaped frame is provided having depending arms 9 provided with holes 4 in their lower ends so that the arms may be mounted on the regular axle of the machine. The arm on the left side may be offset to allow for the belt or other transmission mechanism. Secured to the upper ends of the arms 9 are frame pieces 12 adapted with clamps 15 for fastening to the rear fork of the machine.

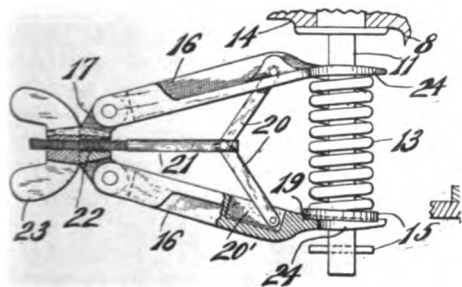


Secured to the frame pieces 12 is a U-shaped support 19 and fastened to the upper cross section of this frame is a spring 22 which extends back and is finally formed as at 22' so that the saddle may be placed in position. The spring 22 is maintained in position on the part 10 and prevented from transverse movement by the clamping piece 26.

Supported from the saddle frame are bars 33 and pivotally secured to them are legs 32 which are slidably connected with the legs 9 at the slots 40. At the lower ends of the legs 32 are footrests which may be fitted in varying holes to permit of adjustments. The attachment depends upon the regular saddle springs and the flat spring 22 for resiliency, the depending legs being permitted to slide at 40 in keeping with the degree of movement in the spring 22.

VALVE SPRING REMOVER.

EDWIN N. KRAEMER, of Cedarburg, Wis., is the inventor of a contrivance to simplify the operation of removing the valve springs of internal combustion motors. The accompanying illustration shows a side view of the device, and a section of the valve from which the spring is being removed. As will

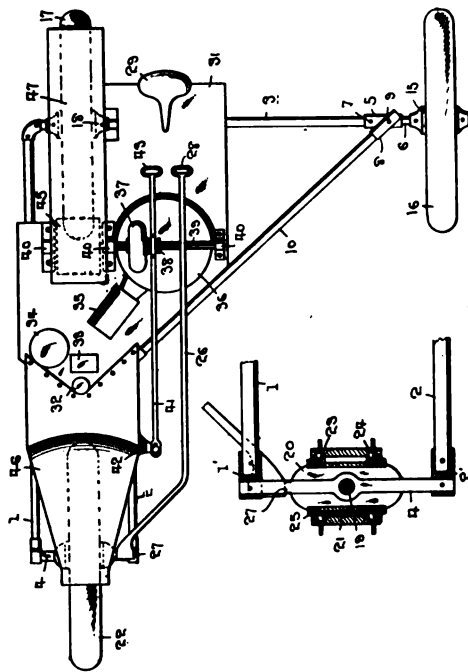


be seen, the Kraemer invention is designed to compress the coil spring on the valve stem so that the cotter pin or other fastening may be removed and the valve taken out. The levers 16 are pivoted at their rear ends to a transverse member 17. The forward ends of the levers are bifurcated, or provided with recesses 18 to accommodate the stem of the valve when in engagement with the valve

spring. When the thumb-screw 23 is turned the threaded rod 21 is drawn in and the arms 20 operate upon the levers 16 to compress the spring.

NOVEL THREE-WHEELER.

WILLIAM H. WILLIAMS, of Statesboro, Ga., is the patentee of a unique design for a motor three-wheeler, fitted with a friction change-speed gear. Only one wheel is driven, the rear right hand one. The motor is placed horizontally on a platform and drives a horizontal friction disc. Along a horizontal shaft above this disc is a friction wheel which is in contact with the disc and which can be moved along the shaft to give any speed ratios desired. The latter shaft has a friction roller which drives the right hand rear wheel. A long lever regulates the position of the friction wheel on the disc and another steers the vehicle by connection with the pivoted front wheel. The platform carries the fuel tank, ignition apparatus, etc., and provision is made for guarding the front wheel. The frame is triangular as shown and the left rear wheel



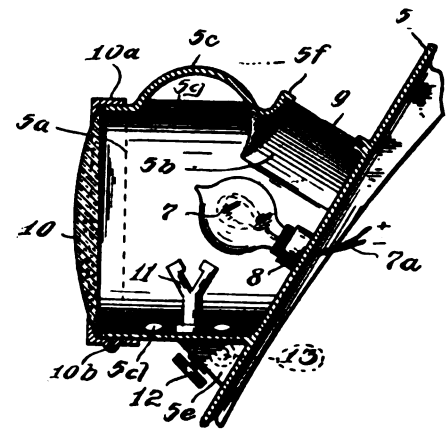
runs free. A spring seat is provided for the driver. The patent, No. 1,036,396, was granted August 20 last.

NEW TAIL LAMP.

JOHN W. ERICKSON, of Chicago, Ill., has obtained patent No. 1,036,984 on an improved lamp, designed for attaching to the rear mudguard of a motorcycle. The lamp has several unique features, one being its integral casting with the plate or bracket on which the lighting device is fastened to the mudguard. This makes for rigidity and low cost of manufacture. The lamp projects only a short distance out from the mudguard, contains a rear window for illuminating the license number and may be used interchangeably for gas or electricity.

THE Jordan-Florea Drug Company, of Coffeyville, has just received a new Excelsior motorcycle for the delivery of merchandise.

A MOTORCYCLE CLUB will be organized in the near future at Santa Ana, Cal.



Erickson tail lamp.

HAVE YOU SEEN IT?

ROBERT J. BENTZ, of 910 Garden street, Kenosha, Wis., reports the theft of his single-cylinder, 4 h. Harley-Davidson machine, which was taken from his home on the night of June 22. The machine was a 1911 model, the serial number being 9774. It was fitted with 26-inch wheels, with a new Goodrich Bailey tread tire on the rear and a Morgan & Wright tire in front. It carried a Majestic tandem attachment, Purdy whistle, Columbia headlight and generator and a small aluminum tail lamp.

AN IGNITION TIP.

"SOMETIMES a wire breaks inside of its insulation and gives no exterior sign of the break," says Emil Grossman, manufacturer of the Red Head spark plug, "and this may cause all sorts of trouble. Very often the blame is laid at the door of the ignition department. Spark plugs are changed and magnetos pulled down needlessly, so it is a good thing before taking everything else to pieces to make sure that there are no interior breaks in the insulation cable."

ONLY THE NUMBER NEEDED.

AFTER a conference between Police Commissioner Geo. S. Hill and Superintendent of Police Eugene Birmingham, of Bridgeport, Conn., it was stated that in future motorcycle cops will refrain from going at a clip of fifty miles an hour when chasing speeding autos, thereby endangering their lives, as it is only necessary to secure license numbers. This step was taken to prevent a repetition of a recent accident.

A MOTORCYCLE ELOPEMENT.

AN elopement on a motorcycle, culminating in a midnight marriage, is now one topic of conversation among the inhabitants of Great Falls, Mont. The bride and bridegroom—Miss Loris M. Gervais and Edward H. Schmidt—are members of prominent families and adopted the two-wheeler to assist them in their plans of quietly marrying.

A WIDE-AWAKE "NEWSIE."

S. O. MURPHY, Jr., of Springfield, Tenn., although only fourteen years of age, is up at 4:30 every morning to deliver papers over a long route on his motorcycle.

IT is estimated that there are 6,000 motorcycles in Cook County, Ill.

MORE than 4,000 motorcycles have been registered in Wisconsin this year.



Just before the start—Participants in the recent reliability run of the Utica M. C.

BALKE IS DENVER STAR.

IN the races held on the Tuileries motor-drome in Denver, September 8, Charlie Balke made exceptionally fast time for that track when he covered a mile in 39 3-5 seconds. He also headed Slivers Boyd in a two-mile match race which was run in heats, winning by a small margin. Cox and Boyd rode neck and neck throughout the five-mile invitation race, which resulted in Cox winning by a foot. Cox's clever riding brought the crowd to its feet, and he was cheered for minutes after the race. A three-mile handicap in which Balke gave Richards a full lap, was the final event of the day. Balke was seriously handicapped by riding the roughest part of the track, and Richards finished 100 feet in the lead.

CLEVELANDITES WIN.

CHARZIN FALLS, Ohio, September 6.—Races held here today under the sanction of the F. A. M. at the Cuyahoga County Fair, drew a large crowd. Huntsbery and Kissig, of Cleveland, took the big events, while Norton won the novice. Fully four thousand people were on hand when R. S. Connell called the first event. Horse racing had cut the track up and slow time was made.

A TRIP TO HUNN'S LAKE.

ONE of the most successful outings ever conducted by the Poughkeepsie (N. Y.) M. C. was held on August 25 to Hunn's Lake. Weather conditions were favorable and there was a good turnout of the riders for the run to the amusement place. There a chicken dinner was disposed of and the picnickers indulged in various games until it was time to start the return trip. The accompanying photograph shows the party at the lake after a fine trip from Poughkeepsie. It is forwarded by Edward Ryan, a Poughkeepsie dealer who went on the run.



DECATUR'S ANNUAL MEET.

NINE interesting events made up the second annual race meet of the Decatur (Ill.) Motorcycle Club, held recently. Twenty contestants were on hand when the first race was called. L. P. Stone, of St. Louis, won the three races in which he was entered and furnished many a thrill. Summaries:

Five miles, singles: W. B. Cash, Merkel, first; M. Pensinger, Excelsior, second. Time, 7:14.

Ten miles, twins: F. Rudy, Harley-Davidson, first; W. B. Cash, Merkel, second; M. Slater, Excelsior, third. Time, 8:07. (Cut to 7 miles on account of accident).

Five miles, singles: M. Pensinger, Excelsior, first; A. Guy, Harley-Davidson, second. Time, 7:28½.

Five miles, twins: L. P. Stone, Excelsior, first; F. Rudy, Harley-Davidson, second; Paul Degner, Indian, third. Time, 5:38.

Ten miles, singles: Herbert George, Harley-Davidson, first; H. Bourgoin, Flanders, second; M. Pensinger, Excelsior, third. Time, 13:57.

Ten miles, twins: Paul Degner, Indian, first; Walter Scott, Excelsior, second; F. Rudy, Harley-Davidson, third. Time, 11:49.

Ten miles, singles: M. Pensinger, Excelsior, first; Herbert George, Harley-Davidson, second. Time, 14:36½.

Ten miles, twins: L. P. Stone, Excelsior, first; Paul Degner, Indian, second; F. Rudy, Harley-Davidson, third. Time, 11:37.

Five miles, twins: L. P. Stone, Excelsior, first; F. Rudy, Harley-Davidson, second; W. B. Cash, Merkel, third. Time, 5:45½.

A WASHINGTON LETTER.

FRANK LONG, of Washington, D. C., who has been acting as F. A. M. referee at recent meets in the Capital City and vicinity, forwards the following letter relative to the condition of the Bennings track and the policy of its management:

"In spite of the fact that local racing men have been holding out for a price of \$5 and \$3 per mile (first and second place, respectively) for riding on the extremely bad track at Bennings, races were run on Labor Day, the starters being four novices using long handle bars, etc., and just off the street. One man in particular who rode in the races gave his word in writing that he would stay with the other boys in any decision reached, some two weeks ago.

"It is beginning to be a pretty state of affairs when motorcyclists in a city like Washington cannot get together and demand reasonable compensation for risking life and limb by riding on such a track as Bennings. The meet was held under the auspices of the Building Trades Council. The local newspapers roasted the management for not having an interesting race card, instead of having 'four riders strung out a quarter of a mile apart in the races.'

"Bennings racetrack is considered by every rider who has visited Washington to be one of the worst tracks in existence for motorcycle racing, the sand in some places being from ten to fifteen inches deep. Dr. Thornley would do well to send an F. A. M. representative down (at expense of local riders) to inspect this track—the writer will gamble that the representative would recommend prompt action."

RAIN SPOILED PROGRAM.

ALARGE crowd gathered to witness the races recently held by the Peoria (Ill.) Motorcycle Club. Two accidents occurred, Paul Degner and Harry Reese, both figuring in spills. A storm, which came up after the third race, spoiled the afternoon's sport.

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FOR SALE.—1911 Excelsior twin, 6 h.; first-class condition; full equipment; looks like new. Price \$150. Ray Walsh, Box 376, Hastings-on-Hudson, N. Y.

FOR SALE.—Late 1911 model Excelsior, single; used about 8,000 miles; perfect running order. Cheap. J. Asendorf, 418 Jones, East, Savannah, Ga.

DO YOU WANT to sell or exchange your Motorcycle? Let me tell you an easy and sure method. Particulars free. F. W. Johnson, 318 W. Washington st., Chicago.

FOR SALE.—1912 Thor 7 h.; brand new; never used. Will sell for best offer. Must sell account ill-health. Clyde Koogle, Myersville, Md.

A RARE BARGAIN.—1912 2-speed Minneapolis Big 5, 11½ h. p. on low. Spring frame. This is a slightly used sample in A1 condition, at bargain price. Address V. H. Ede, District Salesman, Garden Grove, Iowa.

WANTED.—To correspond with riders who are selling goods to motorcycle dealers to interest them in the best side line that ever came down the pike. Some salesmen are making \$10 to \$25 per day on the side. Costs them nothing but a few moments of their time. We pass on the credits, carry the accounts and pay commission in cash. Exclusive territory assigned. "N." MOTORCYCLE ILLUSTRATED.

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FOR SALE.—M. M. motorcycle, 1909, magneto, 4 h., in perfect working order, price \$65. R. J. Metz, 171 Baltic street, Brooklyn, N. Y.

FOR SALE.—7 h. p. Flying Merkel, \$175; 1912, 4 h. p. Indian and Flanders at \$125 each. All in perfect shape. Callwell's Motorcycle Agency, 6 South Water street, Newburgh, N. Y.

FOR SALE.—Harley-Davidson 1912 model; battery ignition; free wheel; studded tires; never punctured; run less than 500 miles. A bargain at \$170. W. D. Brooks, Cloverdale, Mich.

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FOR SALE.—One 1912 speedometer; never used, \$11.75. Circumstances compel me to sell same. C. E. Keniston, 75 Bay 20th street, Brooklyn, N. Y.

SEND FOR CIRCULARS of second-hand motorcycles taken in for Eagles. All cheap for cash. Eagle Motor Co., 28th and Michigan ave., Chicago, Ill.

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PATENTS

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MISCELLANEOUS

MOTORCYCLE STOLEN.—On East street, Thursday, August 29, 1912. Excelsior 1912 model, 7 h. p., chain drive, Presto tank, light, tandem, U. S. Tires. Color, gray, with red trimmings. Dent in rear rim. Number stamped on motor crank case, No. 37563. \$50 reward. E. P. DeBerry, owner, 374 Grove street, San Francisco, Cal. Address information to Chief of Police, San Francisco, Cal.

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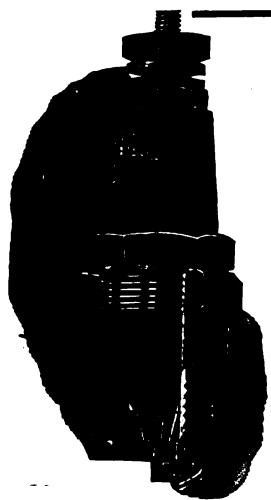
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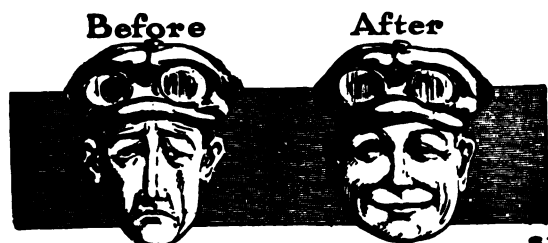
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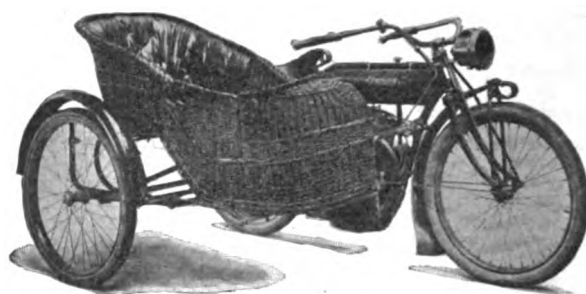
We can cure your ignition troubles, too. The
new principle embodied in the J-D VISIBLE
GAP SPARK PLUG enables you to locate and
cure ignition trouble at a single glance.

One look tells everything

Through the port in the porcelain—outside the
motor—you see if the spark is jumping the gap
in the central electrode. If the spark jumps,
but proper ignition fails to follow, then the
plug must be foul or the carburetion faulty. If
the spark does not jump, then trouble lies be-
hind in magneto or wiring or coil or batteries.
Knurled adjusting nut allows you to widen or
close gap. Opened, it intensifies spark and
cleans point automatically. Uses minimum cur-
rent, makes timing of engine easy, and permits
regulating of spark in any cylinder.

If your dealer has not yet put the J-D VISIBLE
PLUG in stock, we will mail you as many
as you want, guaranteed, prepaid on receipt of
price—just \$1.00 per plug. Write and tell us
the size wanted and make of motor.

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The Baxter Side Car

Strong—Because of its re-enforced frame-work,
its solid Bessemer steel hub spindles, its scien-
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Light—Weight is less by 20 lbs. than that of
any other side car made. This is due to the
proper distribution of weights.

Comfortable—Its deep leather cushions and
its patented tension spring wheel tend to make
the Baxter Side Car the acme of comfort.

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SHOWROOMS, 2304 BROADWAY, N. Y.
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The Motorcycle MANUAL

Is the last word on the subject of a publication giv-
ing comprehensively and in a handy form all the
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Motorcycle engine and frame parts illustrated
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YOU NEED THIS BOOK

For it also tells you how to tour; gives the
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DIFFERENT motorcycles need different lubricating oils.

Some one of the several grades of Gargoyle Mobiloil will get the greatest efficiency from your motorcycle.

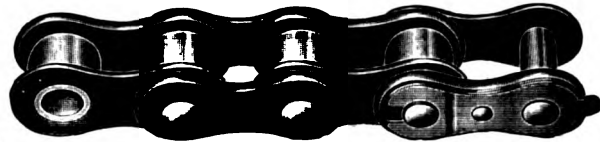
Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

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Distributing warehouses in the principal cities of the world.

"Whitney" Chains Are Built For Strains

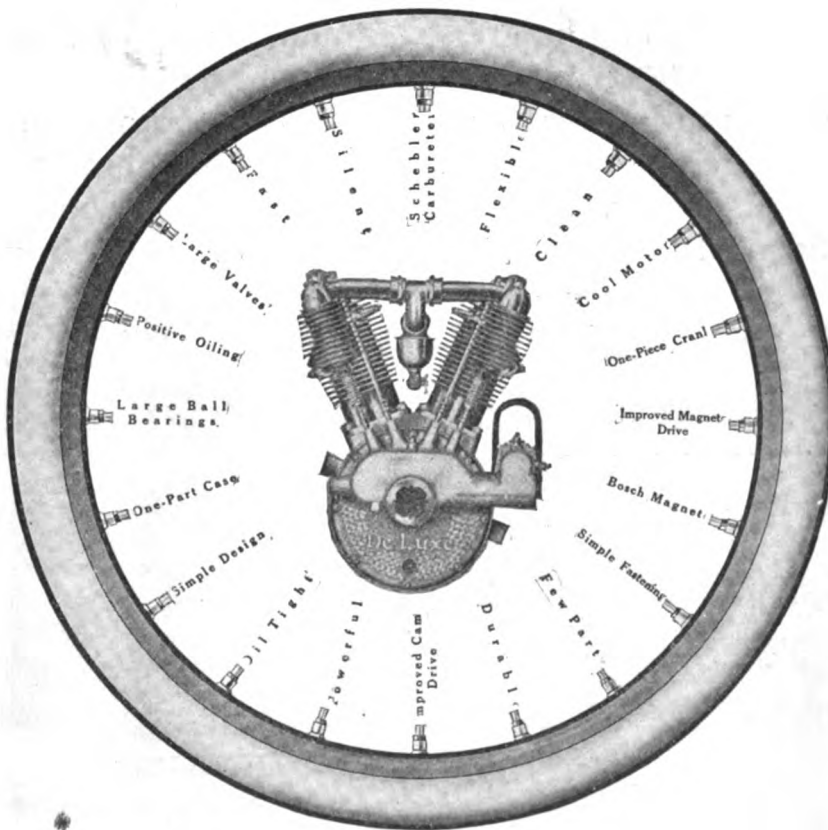
Every "Whitney" Chain has a reputation back of it, a reputation of having been tested in the most trying service and never failing to make good. We've made chains for years and through our untiring efforts to produce nothing but the best our chains have gained a remarkable reputation. You can't go wrong by placing a "Whitney" on your machine.



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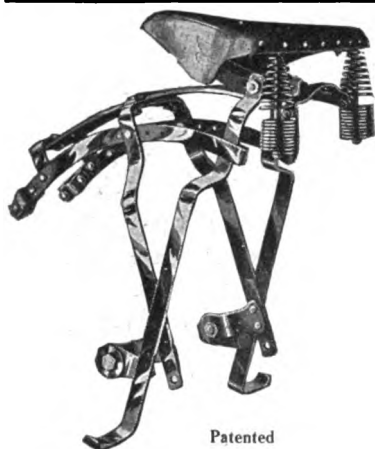
**Like the
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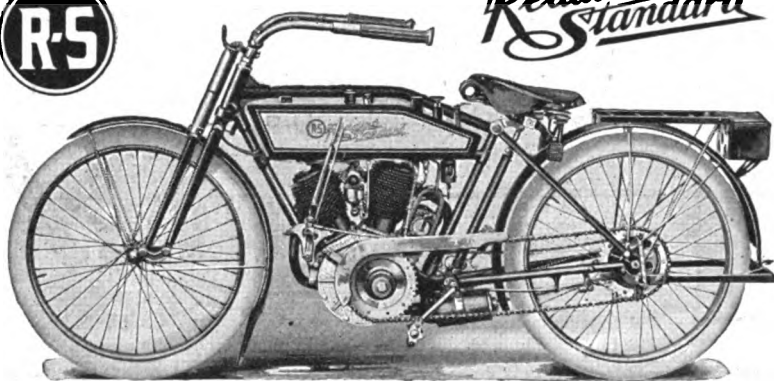
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A-K New Type Carrier Cushion.
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over the steepest hills, through the deepest mud, through the most treacherous sand. Your every wish meets instant response in my great, strong frame. A touch of the throttle, and I loiter at a snail's pace—another, and I bound forward, annihilating space; eating up the miles without abating in the slightest my strong, even, quiet purr. Another touch and I become still—awaiting your further commands.

Do you want to know more about the Perfect Motorcycle? Then write us

READING STANDARD CO.

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Jobbers, Dealers**



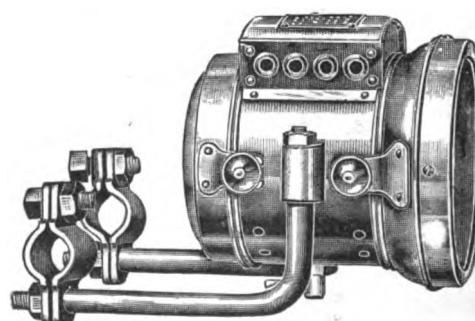
Our line of Metal and Fabric Specialties is of interest to you. They are the "right goods at the right prices" and manufactured by men who have had years of experience in this line.

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We will do the rest.

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Every bump and hollow, all irregularities in the roads as well as

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in the way of vehicles pedestrians, etc., are shown up a long way off by

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"The Old Reliable"

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The *Neverout* Gas Lighting Outfit

TRADE MARK

FOR MOTORCYCLES



Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

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T In knowing you can go WHEN and WHERE you please?

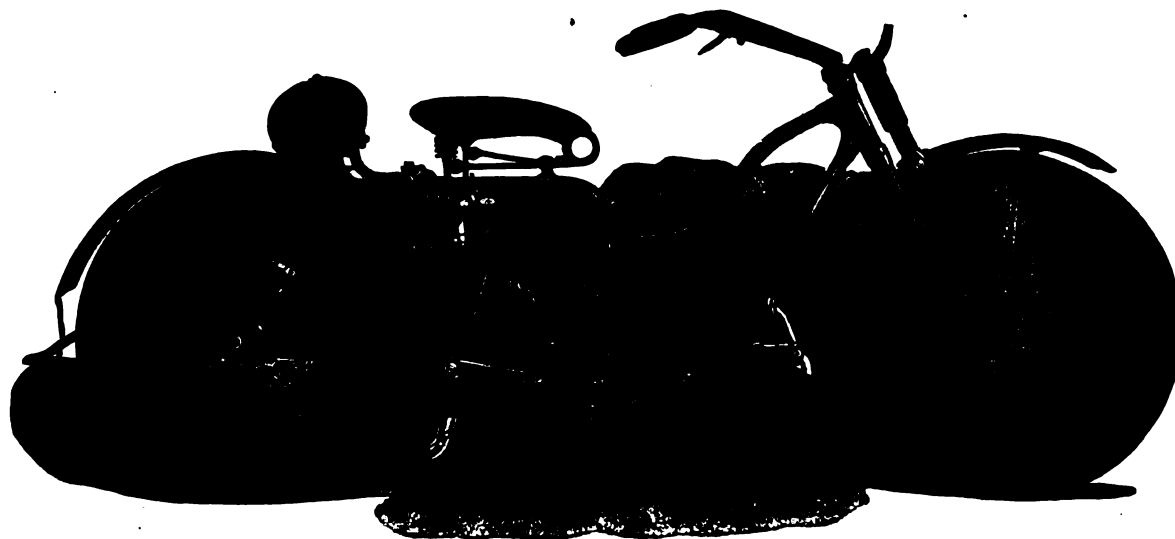
H In riding comfortably?

E In not having to stop for repairs?

A In owning a motorcycle that responds to your every wish?

S In riding a motorcycle that is chuck full of energy?

A In knowing that you have the very best motorcycle that money can buy?



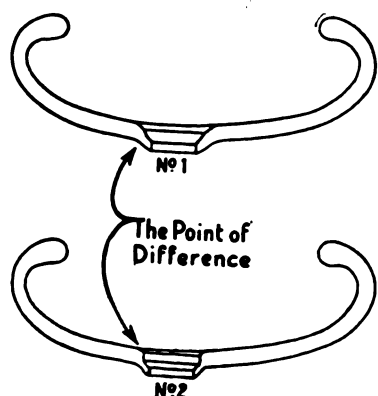
4 H. P. ROADSTER

We build machines for the man who requires all of these. Write for Agency proposition.

For the man who is critical. For THE MAN WHO KNOWS.

This year's model of THE NEW ERA satisfies a long-felt want in the motorcycle world. LET US SEND YOU OUR CATALOGUE.

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Mott Rims for Strength

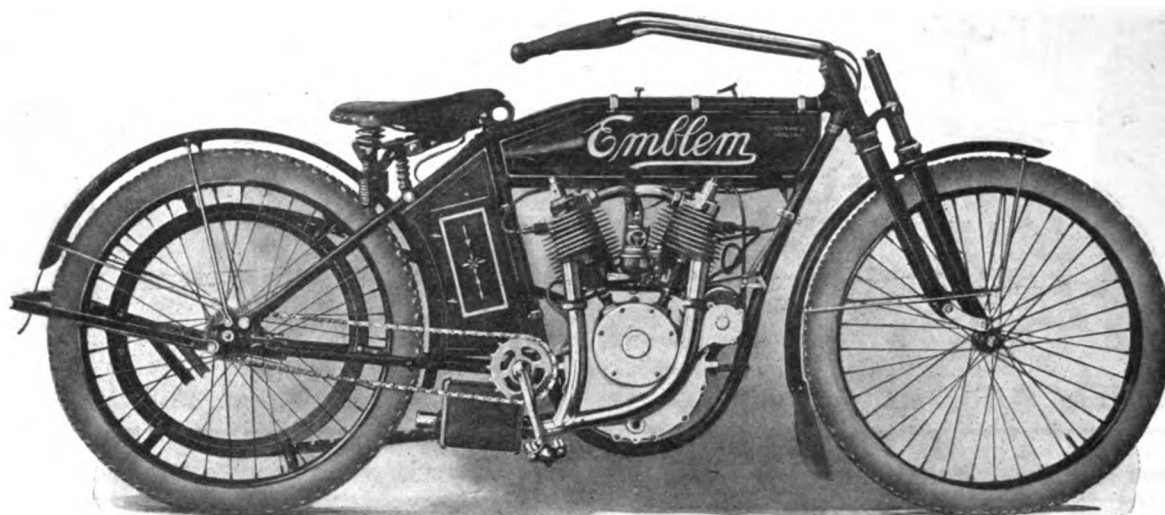
THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

WRITE US FOR FULL DETAILS
THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

MOTT WHEEL WORKS, Utica, N. Y., Manufacturers

R. B. ABBOTT SALES CO., Sales Agents, Majestic Bldg., Detroit



The Emblem

"The Eager Motorcycle"

There are two ways of purchasing a motorcycle—one, by heeding the recommendations of an enthusiastic rider; the other, by a careful study, comparison and elimination. The second, we unhesitatingly affirm to be the best. Get catalogs from all the leading manufacturers; compare their various claims; study closely their different features, then—order an EMBLEM.

EMBLEM MFG. CO., Angola, N. Y.

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Here is the largest, most powerful, strongest and most efficient lamp made

Without doubt, "Old Sol" No. 8 has been a potent factor in promoting night riding. The rider feels a sense of security when he sees before him the brilliant beam of light, 1,500 candlepower strong, which shows every pebble, every bump, every feature of the road for nearly one hundred years ahead! "Old Sol" is as powerful as any and more powerful than most automobile lamps.

Its heavy gauge brass construction, its thick magnifying mirror lens, and its absolute absence of loose parts tends to make it tremendously durable.

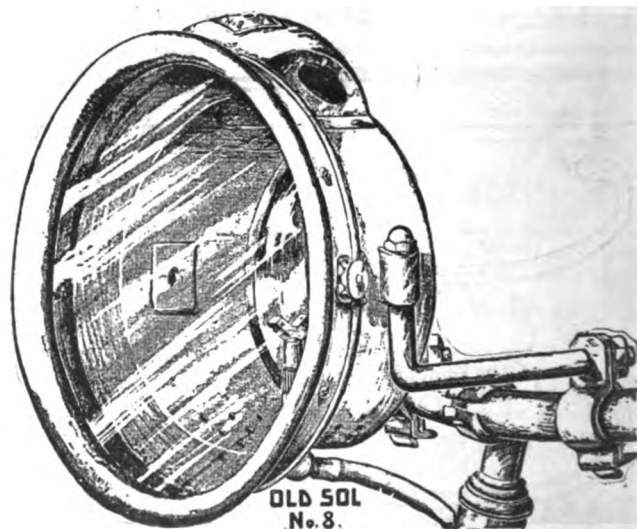
Write for our booklet. It shows our complete "Old Sol" Line.

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Bridgeport, Conn.

OR

POLLOCK MFG. CO., Ltd., Berlin, Ont., Canada



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104% more are buying from us this year than last year—because we save them \$\$\$, delays and trouble.

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you are letting the \$\$\$ slip past you. Look over our price list again. If you want our big catalog of 773 guaranteed supplies write today.

A \$20,000 stock always on hand for immediate shipment.

Motorcycle Equipment Co.
HAMMONDSPOUT, N. Y.

"THE COVENTRY" CHAINS WIN AGAIN

From France comes the news that O. C. Godfrey, on a Coventry equipped Indian, won the French Motorcycling Grand Prix, which took place over the Circuit de Fontainebleau, Paris, on August 25th. He covered the distance of 279 miles in 6 hours, 34 minutes, 59 seconds.

This news, while gratifying, is not at all a surprise to us, nor to the thousands of other "Coventry" Chain users. They know their perfect service-giving qualities, their absolutely non-stretching strength, their marvelous endurance. There's a reason for the perfection of "The Coventry" Chains. It's all in the method of manufacture.

WRITE US ABOUT IT.

SARCO ENGINEERING CO.
112 Broad Street New York

We Can Deliver a Majestic Side-Car to You Immediately

And it will give you the same service as it does to these satisfied users

PROVIDENCE, R. I.

MAJESTIC MFG. CO.,
Worcester, Mass.

GENTLEMEN:—Your letter of June 13 is at hand and contents noted. The Side-cars are becoming very popular here and a great many will be sold. Today is Tuesday and my men are now fitting a Majestic to an Indian motorcycle, and that's the second Majestic I have sold this week. I have no more in stock now, so please hurry deliveries on orders I have on file and at the same time ship me another Red Car for Indian machine. The Side-car I used for demonstration proved very handy to me during the time I have been moving to my new location.

One instance I will mention when I carried six men from old store to new building, two sitting in Side-car, one on saddle, one on rear carrier, one standing on each footboard of the T. T. Indian I use for Side-car regularly.

I am planning to take a Side-car over the roads to Columbus, Ohio, to attend the F. A. M. meeting, and I am looking forward to a very pleasant trip.

Yours very truly,

B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

MAJESTIC MFG. CO.,
Worcester, Mass.

DEAR SIR:—Some time ago Waking & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

I am enclosing small photo of myself and lady friend taken in one of our city parks. You may keep this photo or tack it on a fence, or you can use it in your advertising.

I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

If you care to, you can fix it up to suit yourself and use it for advertising. It will be all right with me.

Yours truly,

CHAR. A. TANGEMAN.

THE BIGGEST BUSINESS BRINGER IN THE MOTORCYCLE FIELD

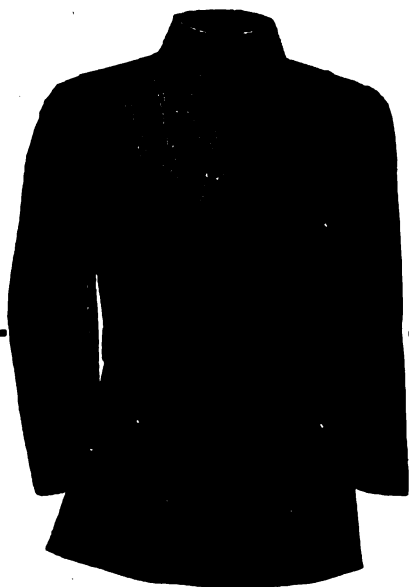
Orders taken from Live Dealers for prompt shipment in Standard Colors.

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"DON'T FORGET THE GIRL"

MAJESTIC MANUFACTURING CO., WORCESTER, MASS.

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is not an indication of vanity. It is your duty to yourself and to your friends to look well.

Clothes that fit well always look well and wear well.

When you

BUY
AURORA

MOTORCYCLE  **CLOTHING**
BRAND

you buy clothing with

**Strength in Every Fibre
Quality in Every Thread**

These motorcycle suits are cut to give a perfect fit, plus plenty of style and comfort. For service they are unequalled. They're the choice of the tourists and endurance riders.

Made in English Roseberry, English Whipcord, Fustian, Petrels and Khaki.

Dealers, investigate our proposition

Fowler-Carnes Company
Aurora, Ill.

TRINITY CHIMES

**An Exhaust Horn with a Musical Tone
Warns Without Giving Offense
A Hair-Raiser When Needed**

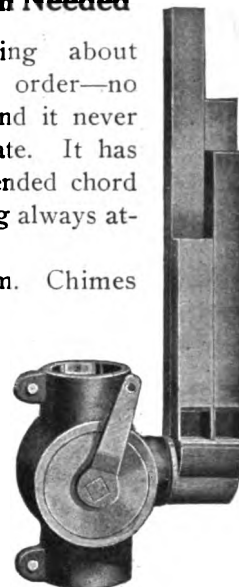
There is absolutely nothing about Trinity Chimes to get out of order—no batteries or wire connections—and it never fails. It costs nothing to operate. It has four tones giving a perfectly-blended chord of pleasing harmony. Its warning always attracts attention.

Valves are made of aluminum. Chimes and valves weigh only 1¼ lbs.

Get the best horn at the lowest price.

Every motorcyclist should have his motorcycle equipped with a Trinity Chimes.

Every dealer should carry Trinity Chimes.



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NEW ERA MANUFACTURING COMPANY
645 Railway Exchange, Chicago, Ill.

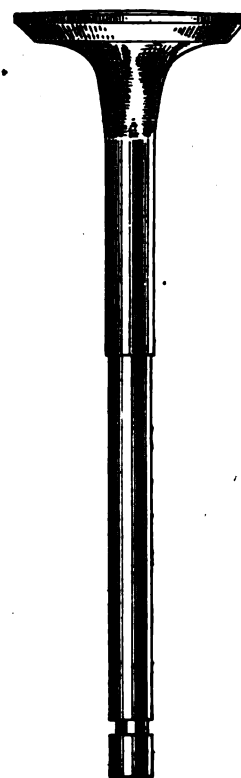
Motorcycle Valve Stems

get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

If you are not using them, will you go into the matter with us?



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Cleveland :: :: Ohio

WEED ANTI-SKID CHAINS FOR MOTORCYCLES

give perfect traction, prevent skidding and slipping.

Mud, deep sand, slippery pavement or snow will not spoil your pleasure if your tires are equipped with Weed Chains—They make all roads good roads.

Easily carried; they can be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer
or write us for full particulars.

WEED CHAIN TIRE GRIP CO.

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NEW YORK

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**Motorcycle
Trip
Cyclometer**

Adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.

*Specially constructed to with-
stand hard motorcycle usage*

Easily adjusted to any motorcycle. Made for 24, 26, 28 and 30-in. wheels.



Sold everywhere—or write
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Price complete with
bracket and striker \$3.00

Also makers of
Odometers, Tach-
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“The Big Single with Twin Power”

There's a lot more to a motorcycle than merely the frame and the motor. There's that conscientious, painstaking attention to details, that pride of good workmanship that distinguishes the **MONARCH** from other machines. The “Big 5” motor is undoubtedly as strong as the ordinary twin and the Monarch has all the new wrinkles and improvements found on the highest priced motorcycles. In addition, perfect workmanship and rigid inspections insure the highest satisfaction any motorcycle can give.

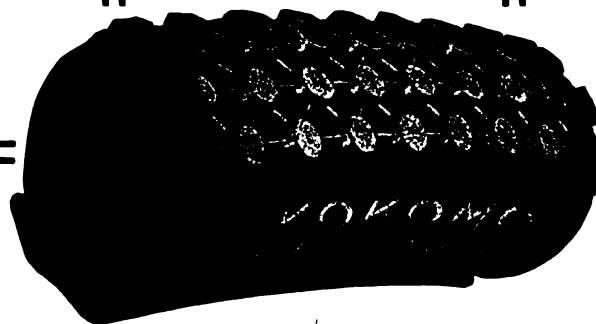
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IVES MOTORCYCLE CORPORATION

200 John Street

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KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

Low Cost
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Long Wearing } **TIRES**

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"EXTRA SERVICE"

TIRES

No tires excel Federal Tires from the standpoint of durability—lasting service—and very few tires are their equal.

The extra service Federal Tires deliver is due to exceptional quality construction.

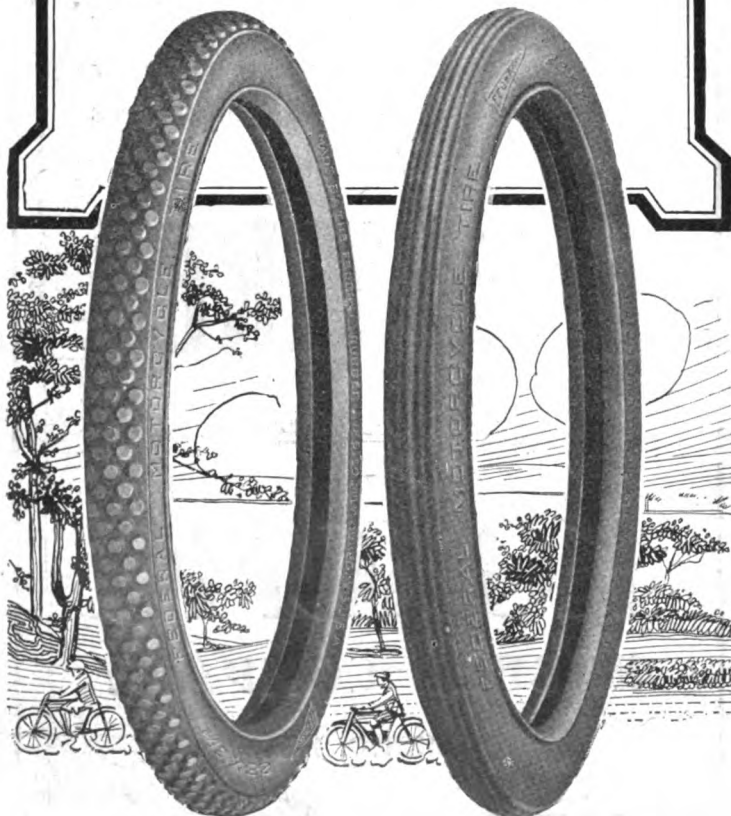
Federal Tires show their class by lasting longer and giving more general satisfaction than other tires—yet they cost no more. *Try Federal Tires and note the extra service.*

Federal Tires are made in Corrugated and Studded treads in all sizes and in single and double clinch types.

They are supplied through leading dealers everywhere. Interesting tire book mailed on request.

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Gasoline Gauges For All Motorcycles

\$1.50 postpaid. Give depth of tank.

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LEGGINS—CLOTHING—SPECIALTIES

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Are our Specialty

(From Customers' Patterns Only)

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The **ONLY** gas tank that, when empty, can be immediately exchanged for a full one, **ANYWHERE and ALWAYS**

ASK FOR

Colonial Motor Oil

Medium Grade

For Motorcycle Lubrication

Expressly prepared to meet the conditions of motorcycle lubrication, which differ radically from automobile lubrication.

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MOTORCYCLE ILLUSTRATED

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WHISTLES**

**LAMPS,
SPEEDOMETERS**

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Infallible Exhaust Whistle, complete, \$3.00

**Infallible Speedometers, Model No. 1, \$7.50; No. 2, \$10;
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F. A. BAKER & CO. 104 Warren Street
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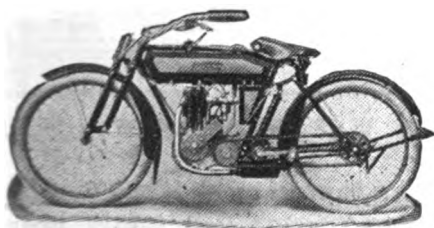
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**Consider Two Points of the
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**Absolute Dependability
and**

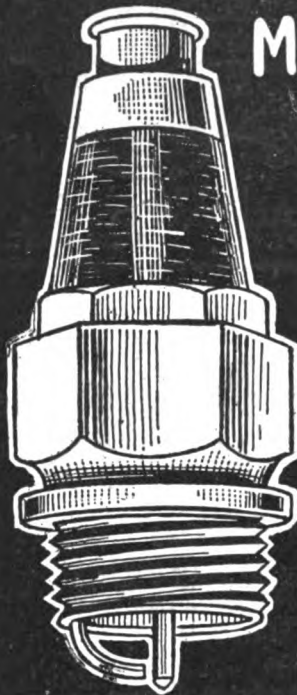
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of this and also**

10 H.P. TWIN MODEL

THE MINNEAPOLIS MOTORCYCLE CO. MINNEAPOLIS, MINN.

Mosler's MOTORCYCLE PLUGS



**Give
Absolute
Satisfaction**

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well known motor-
cycles by actual
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because more users
testify to their

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**We are the Leading Motor-
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in the World.**

**We make a specialty of
Plugs for Motorcycles as
well as Automobiles.**

**A.R. MOSLER & CO.,
P.O. BOX "M"
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93

REMEMBER THE NUMBER "153"

When ordering this latest creation in motorcycle lamp-dom. Not an undesirable feature about it.

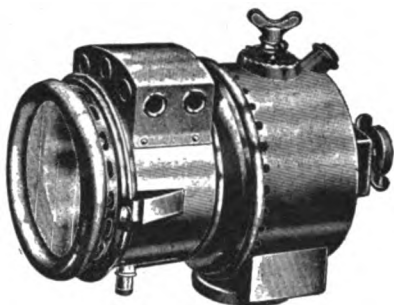
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Depth, 5 in.; Dia. Door, 3 in.; Height, 5 in.; Weight, 24 ounces; Finish, nickel plate. Efficiency and Durability guaranteed.

List \$5.00

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No. "153."

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The Acme is the ultimate choice of every rider.

Write for booklet.

Sarco Engineering Co.
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IT'S GUARANTEED

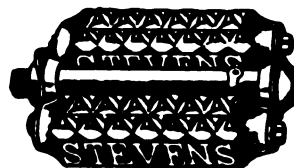
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- You will never know how perfect your Motorcycle can run until you try SPEEDO. Attached in five minutes on intake manifold. Your money is refunded if you are not pleased.

PRICE, \$2.00, Including Decarbonizer

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Celebrated Motorcycle Pedals
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FRAME PUMPS
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Steepest Track in the World

Races held on Wednesday, Saturday and
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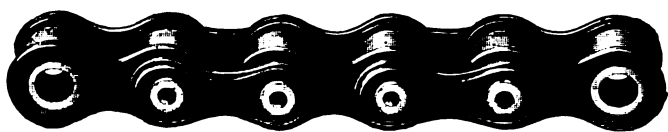
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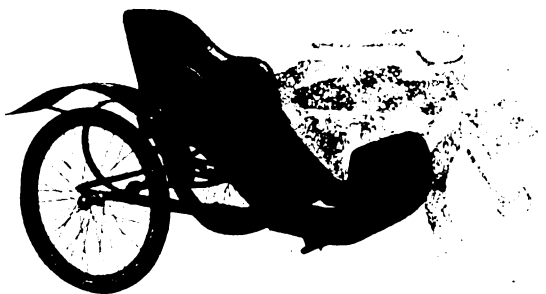


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are the result of eight years' experience in frame and body building.

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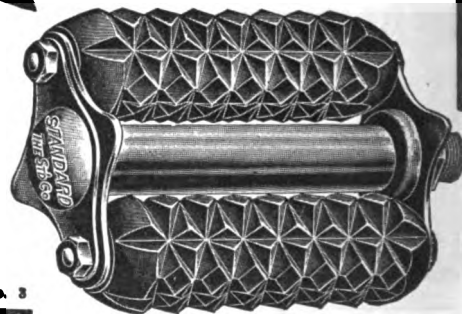
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THE STANDARD COMPANY

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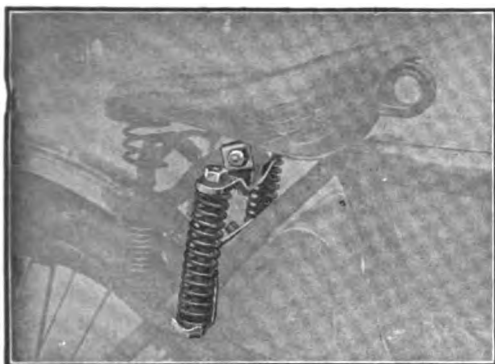
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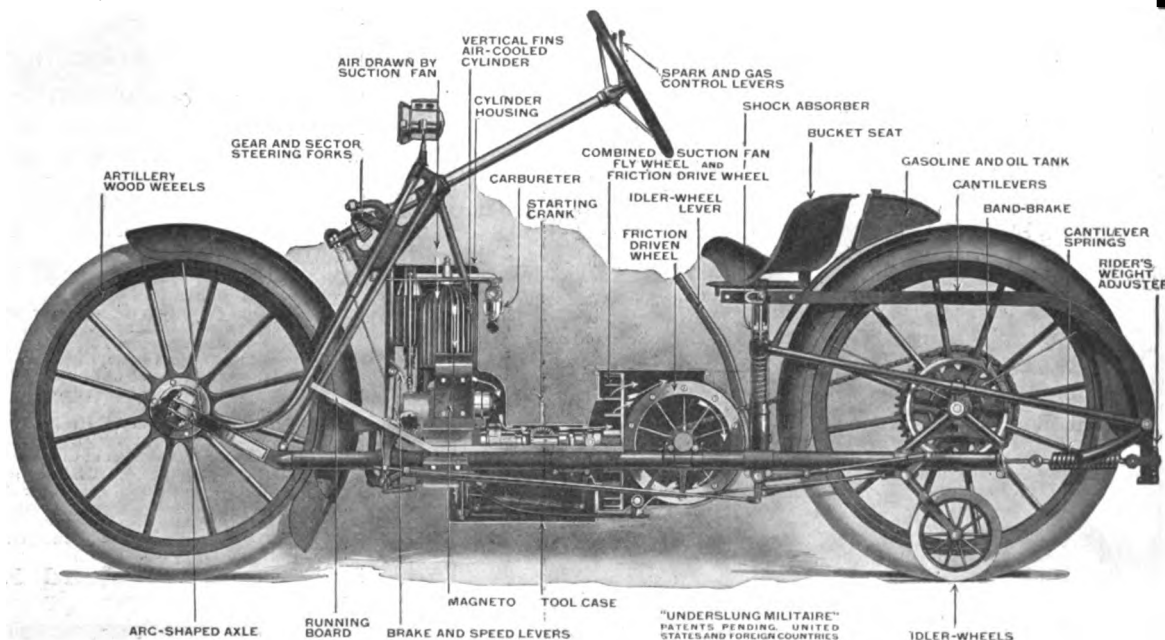
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THE "MILITAIRE" is built in *anticipation* of the logical evolution of the motorcycle. It is the result of keen study of traffic and other conditions in this country, and we unhesitatingly affirm that the "MILITAIRE" is better fitted to cope with road conditions than any other motorcycle on the market. It is radical, we admit, but so was Fulton's steamboat, and Marconi's wireless, and Westinghouse's brake.

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for your motorcycle. Nothing too old, nothing too new for us to buy. We will buy one or a hundred.

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At over 3,500 revolutions it is just as effective.

All air ports have been enlarged.

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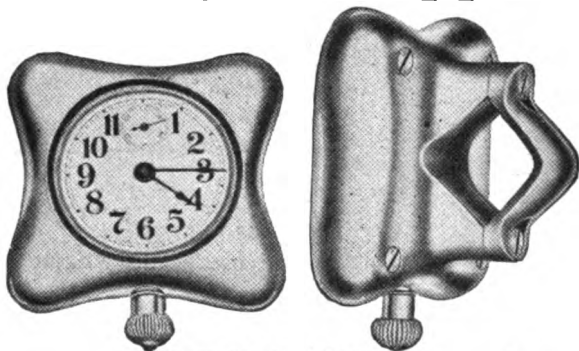
Send for free catalog. Our Engine Trouble Text Book, 54 pages, will be mailed for 10 cents.

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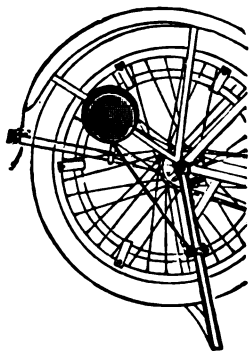


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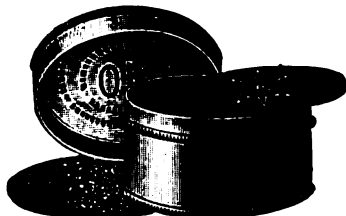
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movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$3.50.



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avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
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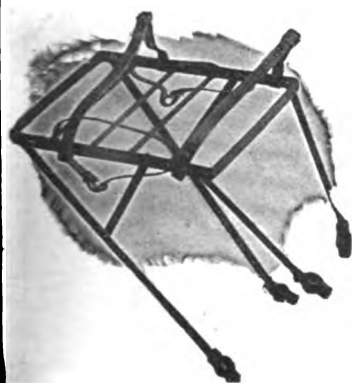
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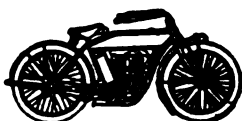
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The Federation of American Motorcyclists

Two cents per week is all it costs to be a member of the F. A. M., the national organization of motorcyclists. Its strength and influence and the value of the service it can render you are directly proportioned to the number of its members. Join and ask your fellow riders to do likewise. The F. A. M. is worthy of your support. Write

Chairman Membership Committee, F. A. M.
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THIS IS THE TIME TO BUY Motorcycles and Automobiles

AT 1/4 to 1/3 THE PRICE WHEN NEW

We specialize in selling standard makes of motorcycles and automobiles in slightly used condition.

Large assortment of used motorcycles, single, two and four cylinders; chain, belt or shaft driven—Indian, Pierce, R-S, Excelsior, Curtiss, F. N., N. S. U., M. M., Harley-Davidson, Thor, New Era, Merkel and other high-grade makes from \$35 up.

Practically all styles and makes of automobiles at \$100 up.
We guarantee each purchase to be in perfect running condition.

Agents wanted everywhere.

Write for price lists and descriptions.

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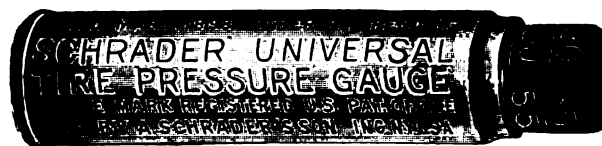
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A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

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(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

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U.S.A.

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August 15, 1912.

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Gentlemen:

We hereby authorize you to enter our order for 15,000 Spartan Brand V Shape Motorcycle Belts for delivery during the season of 1913 as we may from time to time specify.

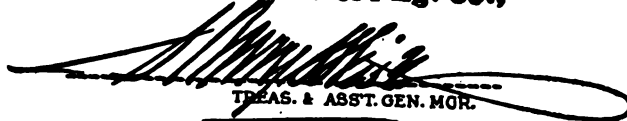
Having used your belts in the equipment of our Flying Merkel Motorcycle for the past three seasons we fully recognize Spartan quality and take pleasure in renewing our contract with you for the coming season.

We will be pleased to have you forward us regular form contract covering the above for our acceptance.

Yours very truly,

HSW:SF

The Miami Cycle & Mfg. Co.,


TREAS. & ASST. GEN. MGR.

SPARTAN SUPERIORITY AGAIN PROVEN

This is the largest single order ever placed with any Belt Manufacturer
DOESN'T THIS CONVINCE YOU?

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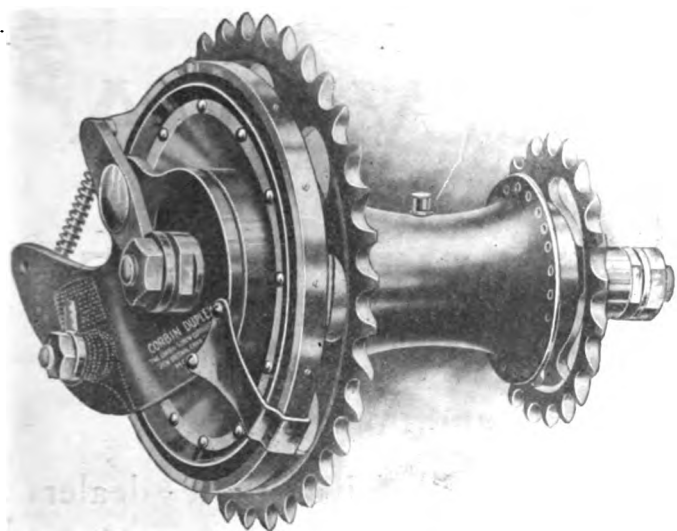
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MOTORCYCLISTS: To insure CONTROL and avoid accidents—insist that your machine be equipped with the



CORBIN Motorcycle Band Brake

¶ The 1913 model of this famous braking device—the original motorcycle brake—is the simplest, strongest and most reliable brake any motorcycle can require, however powerful. Adaptable to all makes.

¶ An improvement for 1913 is the nut lock formed by two projections on one end of the band. Prevents the nut turning or jarring loose. A further improvement is a bracket attached to the lower side of the brake arm. Keeps the band from dragging on the drum or sagging when expanded. Also prevents loss of power or overheating.

¶ Be on the safe side. About 50% of all motorcycles made today are Corbin equipped. Insist on the Corbin Band Brake for *your* motorcycle.

Write for new 1913 catalogue showing all Corbin brakes and hubs for bicycles and motorcycles.

The Corbin Screw Corporation Division

(THE AMERICAN HARDWARE CORPORATION)

WESTERN OFFICE:
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NEW BRITAIN, CONN.

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Don't be backward in bringing forward
these tires—

PENNSYLVANIA

Oilproof

VACUUM CUP TIRES

FOR MOTORCYCLES

They're OIL PROOF and SKID PROOF!

This colossal improvement will give those dealers who handle Pennsylvania Tires a strangle-hold on the trade of their territory.

1913 is going to see the output of motorcycles more than doubled. There are upwards of 30 manufacturers now producing motorcycles of distinctive designs. One of these makers has contracted to produce 35,000 machines during 1913.

Think of the increased tire business! And think how much of it you can corral if you sell the only oil proof tire on the market!

Pennsylvania Rubber Company

(Reorganized February 1, 1913)

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An Independent Company with an Independent Selling

he great, big, smashing sales features of

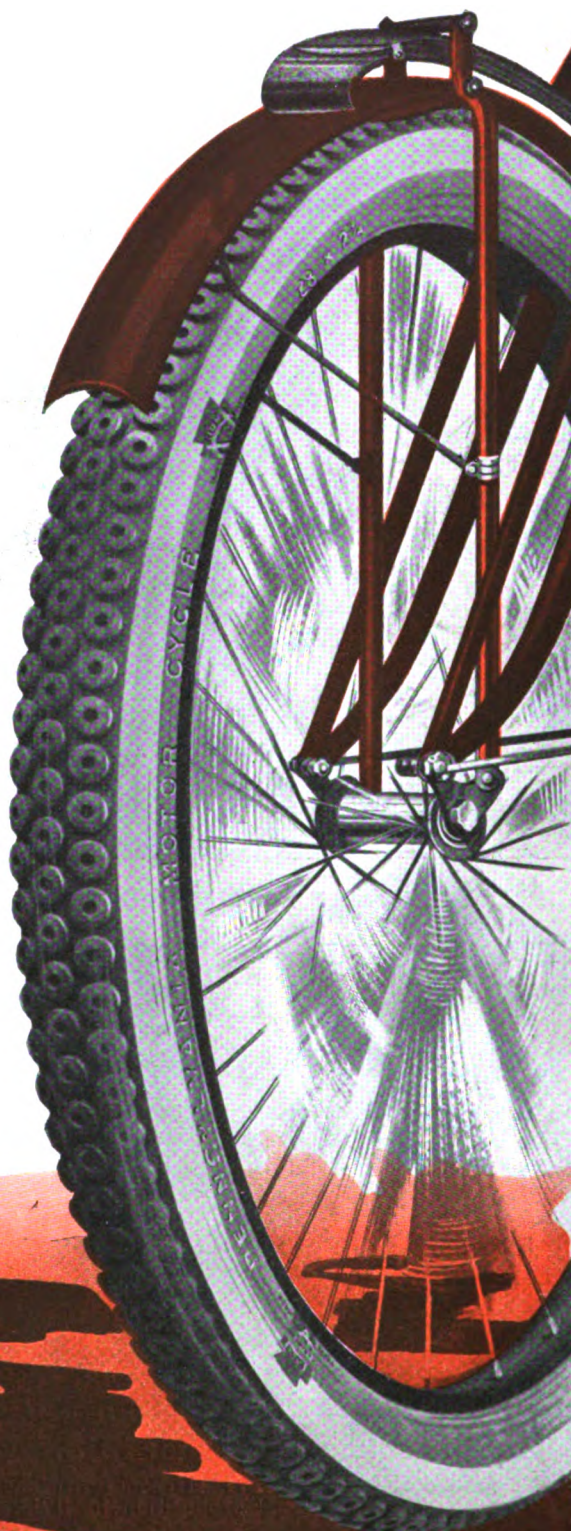
Pennsylvania Tires have already "arrived" to stay because of their remarkable anti-skid and long service qualities and liberal guarantees. Now they're OIL PROOF. Motorcyclists need no longer fear the effects of riding over oiled roads or pavements or of oily garage floors. Pennsylvania Motorcycle Tires resist oil disease.

Whoop up this feature good and loud. We're doing it all over the nation in our largely increased consumer advertising. Cut in on the results.

Motorcycle riders are shrewd. They'll buy the tires that are safe and sound and lasting.

The attention of Jobbers and Dealers is directed to our selling policy. Write us early. Delay may mean that you will lose the sales—lead in your territory.

ny - Jeannette, Pa.



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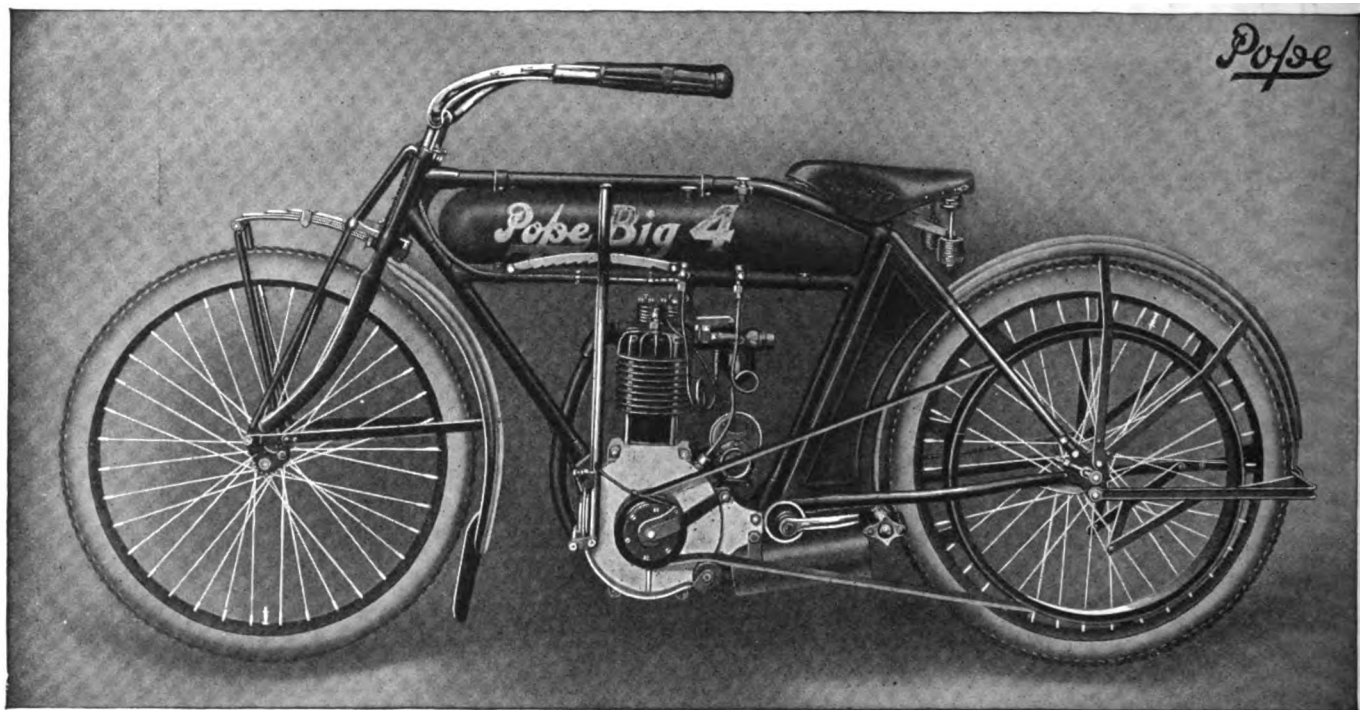
The New
"Big 4" Model K
\$200

POPE

Two Models of the Highest Quality
BIGGEST VALUES OBTAINABLE

The Popular
MODEL H
\$165

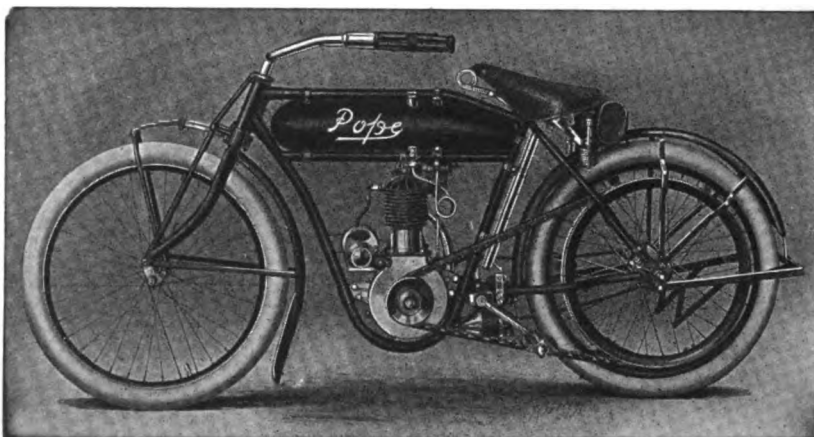
The New Pope "Big 4" is powerful and wonderfully efficient. It embodies the best materials and the finest workmanship,—is strong, durable and good for long, continuous service. It has everything the rider wants—magneto, combination clutch and idler worked by one lever, double grip wire control, 56-inch wheel-base, 28-inch wheels, low center of gravity, cushion spring fork, easy-riding saddle, quick action stand operated by one foot, and enclosed mud guards that afford perfect protection.



MODEL K, POPE "BIG 4" WITH MAGNETO, FREE ENGINE CLUTCH AND IDLER, \$200

Increased Power Due to Overhead Valves

In power, flexibility, smoothness of performance, ability to climb hills, and all-around reliability, the POPE "BIG 4" SETS A NEW STANDARD OF SINGLE CYLINDER EFFICIENCY. ITS POWER AND SPEED WILL SURPRISE YOU.



MODEL H—\$165—WITH MAGNETO

The Pope Model H Has Given Universal Satisfaction

It is permanently established in the field for which it was designed. Its success has been nothing short of phenomenal. There is an immense number of people who prefer a light, moderate-powered motorcycle of the Model H type because it is easy to handle, economical to run, and comparatively inexpensive to buy.

DEALERS! Now is the time to close for 1913. Why not sign for the most profitable list?

We want dealers everywhere. If your town has no Pope dealer, write us today for our special proposition for 1913. Catalogs on request.

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Northwest

PACIFIC COAST DISTRIBUTORS
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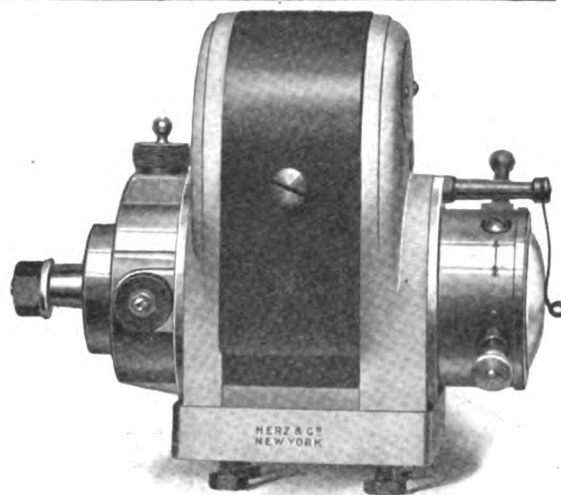
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For a Fat, Hot Spark-

a spark that you can count on even at very low speed - the kind of spark that spells the finish of jumpy, irregular ignition - equip your machine with

HERZ MAGNETO

It gives a great big flash at every turn - every turn, not just once in a while. It's a "nothing but business" Magneto - a hard, steady worker with no funny tricks.



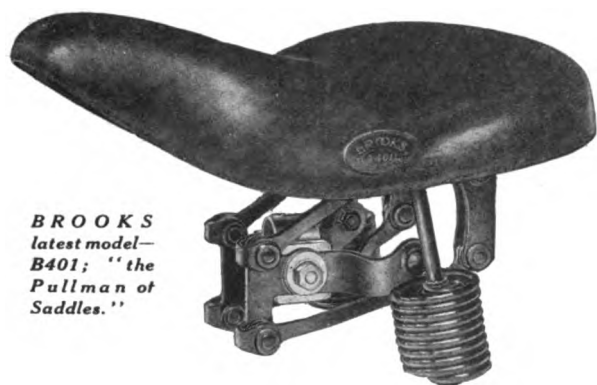
HERZ MAGNETO is small and light. It is not affected by atmospheric conditions and is protected absolutely against dust and moisture.

For easy starting with retarded spark, no other Magneto can compare with it.

Use Herz Plugs with Herz Magneto.
The combination is the ideal ignition system.

HERZ & CO.
295 Lafayette St., New York.

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latest model—
B401; "the
Pullman of
Saddles."

Choose that Saddle—

choose any other model
which bears the name of
BROOKS, and—

You will ensure perfect com-
fort—perfect pleasure.

We make that statement with
every confidence—we make
the saddle and,—we know its
merits, and to you we say—

That test—actual test upon the
road—will reveal, better than
any argument we can put for-
ward here, the absolute super-
iority of the

BROOKS—
the original and only
genuine Compound-
spring Saddle—

Will you make that test?
Will you choose that saddle?
Do so, and ensure "true luxury awheel."

J. B. BROOKS & CO., Ltd.
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THE ACME SIREN MAKES 'EM JUMP

There is nothing like the personal application. Suppose you were sitting comfortably on a big hay wagon which was traveling at the proverbial snail's pace directly in the middle of the road, and you heard behind you a low wail which gradually increased to an ear-piercing crescendo shriek, and then gradually died away into a low moan—wouldn't you turn out first and look to see what it was afterwards? Of course, you would.

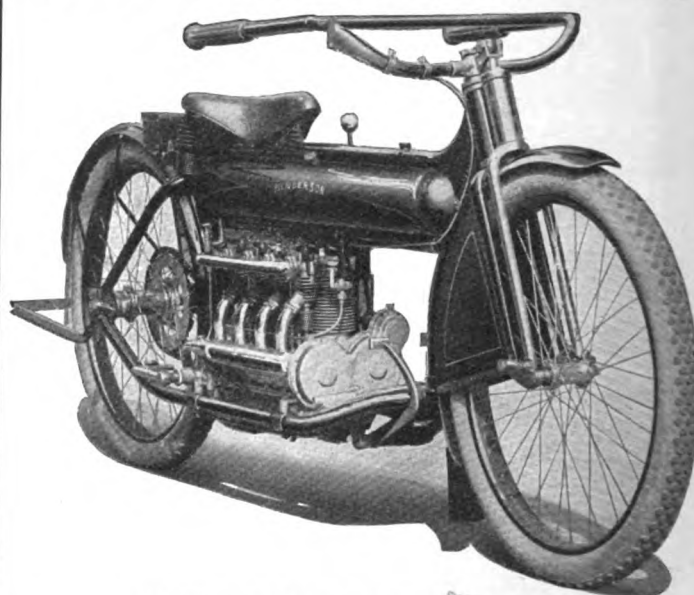
That's the response that is invariably given to the Acme Siren, the little horn with the enormous range. Have you seen it? It is new, it is effective, it is substantial and durable. The sound is produced by a revolving reed through which the air is forced by a plain bulb. The horn is of solid brass, handsomely nicked and retails at \$5.00. Send the money or ask for our booklet. Better send the money first—it saves time.

SARCO ENGINEERING COMPANY

112 Broad Street, New York



HENDERSON



4 Cylinders, 7 horse-power—\$325.00

The Henderson's great success has been due to the fact that it is more comfortable than any other motorcycle; holds the road better; and has more than enough power for any road or hill.

Significant facts—both for the rider and the dealer.

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TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per

day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4.....\$5.50	28 x 2 1/4.....\$6.50	28 x 3.....7.25
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Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. BRICTSON, President

The Bricton Mfg. Co.

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President,
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Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

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MOTORIST'S COUPON ORDER BLANK:
Enclosed please find.....
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ship by ex. or fgt.....(quantity).....Bricton

Motorcycle Treads, size.....with the understanding if they
are not perfectly satisfactory I may return them within 10 days
from receipt of shipment and you will refund my money.

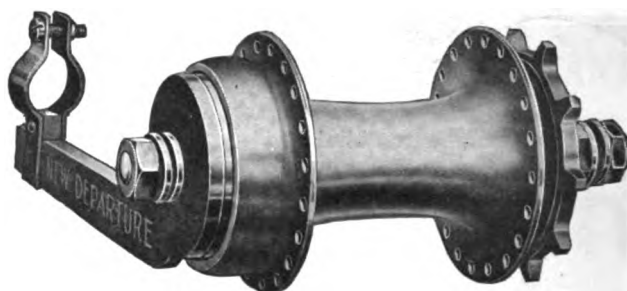
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NEW DEPARTURE

Motorcycle Specialties

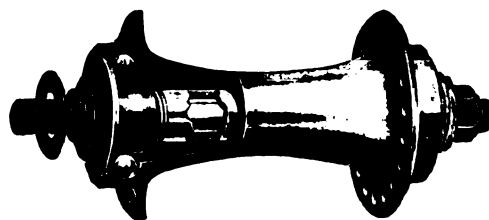
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and giving maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen 1/4-inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.

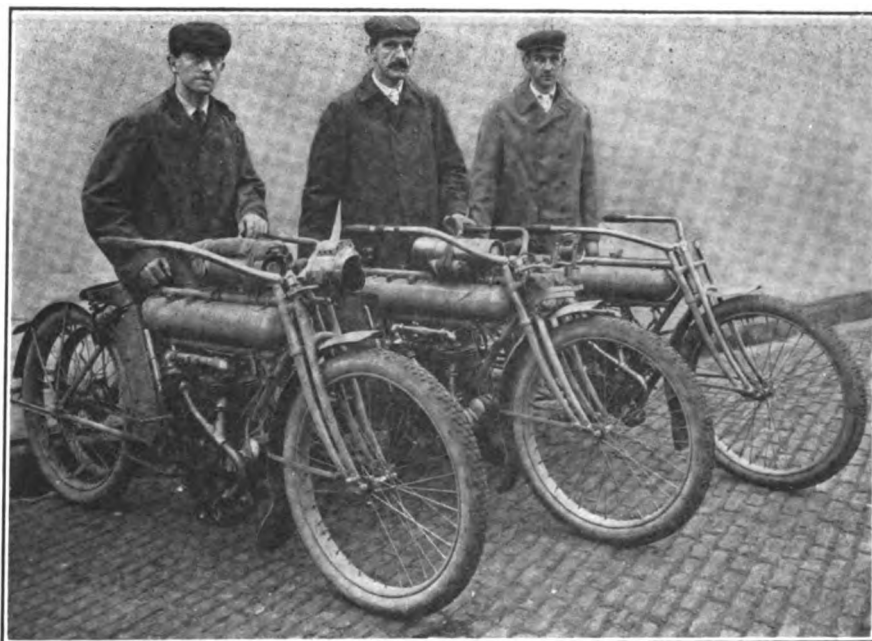


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THE NEW DEPARTURE MFG. CO., Bristol, Conn.
COASTER BRAKE LICENSORS

**The Yale
has made
good and
this**

Proves it!



P. W. STEVENS, ORTIE STEVENS AND GEORGE REICHEY.

WE'RE going to "talk right out in meetin'." We want to proclaim positively and with decision that the YALE has made good—that it has proven conclusively that it has all the requirements of a perfect motorcycle: speed, power, strength, durability and comfort.

This has been amply demonstrated by the New York-New Jersey 24-hour Endurance Run of 325 miles on September 15th-16th, in which the Yale team, composed of P. W. Stevens, Ortie Stevens and George Reichey made a perfect score. Stevens copped the gold medal and Reichey got the silver cup. That's only one instance. Then there's that Middletown to Elyria run of August 31st-September 1st. Again, the Yale was the only perfect-score machine.

DOESN'T THIS PROVE ANYTHING TO YOU?

If past performances count for anything at all the Yale should be the machine for you to investigate.

IMMEDIATE DELIVERY.

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THE CONSOLIDATED MANUFACTURING COMPANY
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Spartan *versus* Oak-Tan

Facts of Vital Interest to Every Motorcycle Belt User

Furnish the *right* belt for the *right* drive--this has been our *inflexible policy* for over sixty years. To it may be attributed that steady and constant growth, year by year, which has finally made us *the largest belt manufacturers in the world*.

Although the sale of Oak Tanned Leather is a large factor of our business *we know* positively, from exhaustive experiments, that Oak Tanned Leather is absolutely unsuitable for the strenuous work demanded of a motorcycle drive.

Our experiments proved that a motorcycle belt is subjected to the severest use--often abuse--of any form of belt transmission. For this reason we have had to produce a special belt for this special purpose and that belt is the famous

--Spartan--

THE ONLY MOTORCYCLE BELT FOR EFFICIENT, ECONOMICAL AND SATISFACTORY SERVICE—the motorcycle belt already adopted by 80 per cent. of the manufacturers of belt drive machines.

We are absolutely *honest* in our statements about Spartan Leather as compared to Oak Tanned.

Spartan Leather is specially made for extreme work and for use under all climatic conditions.

Oak Tanned Leather is manufactured primarily for inside or dry work under favorable conditions—when waterproof cement is used Oak Tanned Belts may be used successfully in damp places, but they will not withstand a continual wetting and drying *without* cracking.

Spartan Motorcycle Belts will resist oil, water, steam and heat, generated by excessive pulley friction—they are not affected by climatic changes—that we guarantee absolutely.

Oak Tanned Motorcycle Belts very rapidly deteriorate from exposure to oil and when subjected to the action of heat, steam, etc., they are quickly ruined.

To demonstrate: Place a sample of Spartan and one of Oak Tanned Leather in boiling water or live steam for five or ten minutes, or as long as you wish—allow both samples to dry out—then note the results. The Oak Tanned is absolutely ruined while the Spartan remains in perfect condition. Another test: Slip the motorcycle belt over the front pulley while the engine is running at high speed—the friction thus produced will generate considerable heat—the Oak belt is quickly burned—the Spartan remains uninjured.

Our Spartan guarantee is your protection and guarantee of an absolutely perfect transmission—we have not guaranteed or promised anything Spartan belts cannot or will not fulfill.

Manufacturers, Dealers, Riders, can you afford to take chances? We believe that we will gain your friendship and good will by giving you the above comparative facts, which we positively stand back of. Insist on Spartan—the name is stamped on each belt—and do not accept any belt that may look as good and is cheaper. The use of poor belts lowers the standard of any motorcycle and adds danger to the user.

The Graton & Knight Mfg. Company

Franklin and Norfolk Streets, Worcester, Mass.

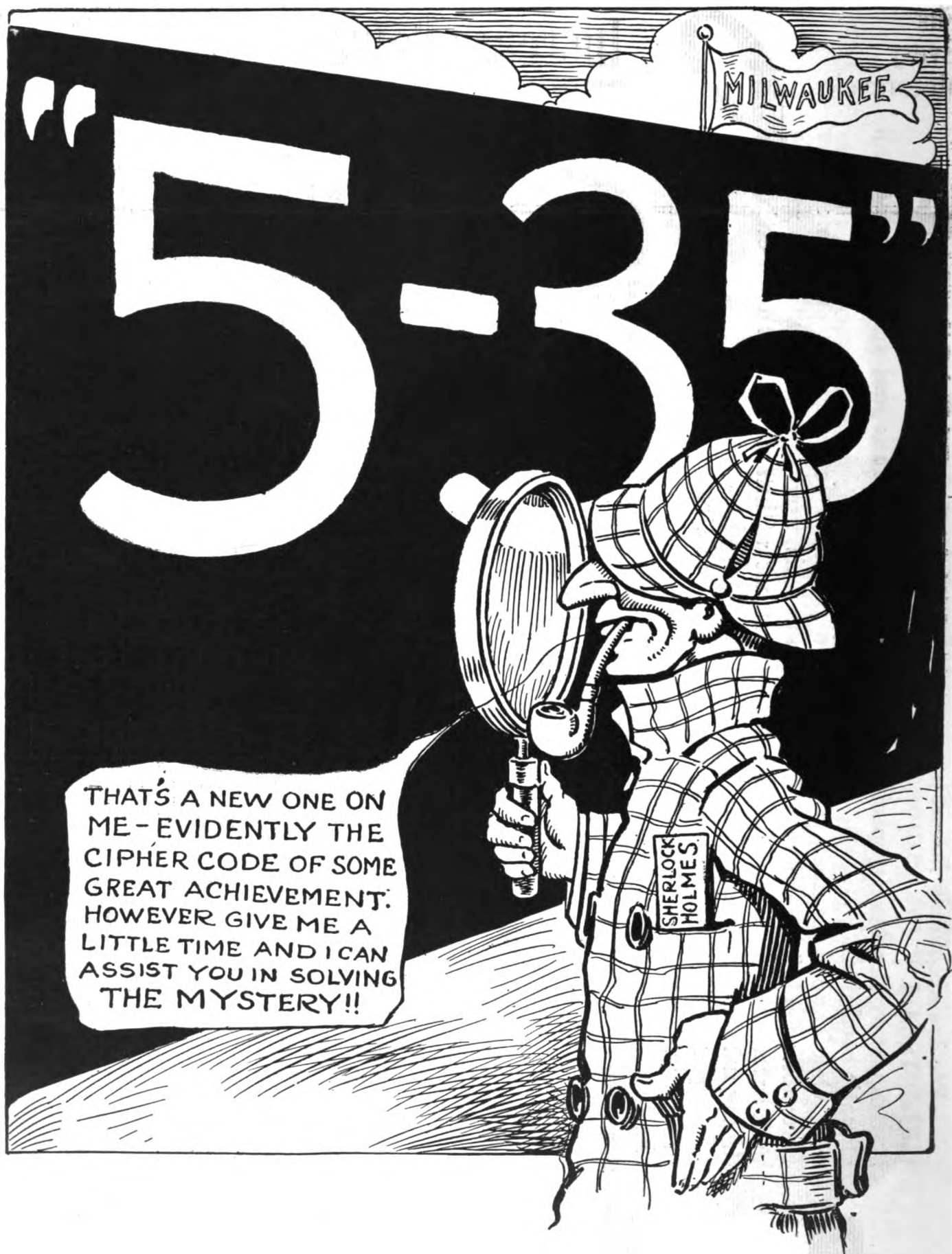
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See Page 57 For a Good Clue

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Fits
Every
Motorcycle

Increase Power

Speedo

IT'S GUARANTEED

YOU will never know how perfectly your Motorcycle can run until you try SPEEDO. It is as essential as the carbureter. Thousands already in use. Attached in five minutes on intake manifold. Breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. Automatically gives just the proper additional air your running speeds require. Passes you by the other fellow. Pulls you through sand and mud. Sails you over the hills. Small enough to be out of the way. Big enough to work wonders.



"It's the SPRAY That Does It."

Absolutely Guaranteed:

1. To Increase Power 20%
2. To Save 20% Gasoline
3. To Remedy Carbonization
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Price \$2.00 Including Decarbonizer

Your money is refunded if you are not pleased.
No dealer is authorized to sell otherwise.

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REMIND YOURSELF TO ORDER TODAY

FULTON-McCUTCHAN CO., Distributors, 1145 Michigan Avenue, CHICAGO

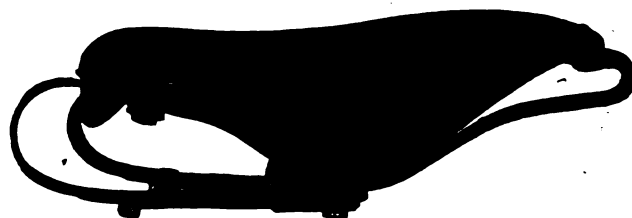
If my dealer hasn't Motorcycle SPEEDO, I will order one direct. Amount, \$2.00 prepaid. Refunded if I am not pleased.
 Fulton-McCutchan Co.,
 1145 Michigan Ave.,
 Chicago, Ill.

1913 Standard and Cavalry No. 4

*Two saddles which stand foremost
in the field*

CAVALRY No. 4

The best saddle for long distance runs. Most endurance records have been made on the Cavalry because of the large seating room, which permits of shifting; because of its narrow pommel, its low saddle position.



"Superba" Leaf Spring

On Standard No. 4 or 5, made of chrome vanadium spring steel with swing hinges in rear. Give unlimited spring action and lowest saddle position. Orders have already been received for 50,000 of these saddles.

"Ask the rider and watch him riding."

H. & F. Mesinger Mfg. Co.

Austin Place and 144th St., N. Y.

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WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubos, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

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When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

See Pages 22 and 23 for the Story of
**THE MOST STRENUOUS TEST FOR MAN
 and MOTORCYCLE EVER ACCOMPLISHED**



From Portland, Ore., to Portland, Me., via the Southern Route—5,964 miles—is the remarkable trip that has just been accomplished by Jos. P. Schantin, of the former city. Schantin is now on his way back to Oregon, via the Canadian Route, and at last reports had reached Milwaukee.

Not once during this arduous journey has Schantin experienced the slightest mechanical trouble of any nature whatsoever, his Flying Merkel pulling him through desert sand, over mountain ranges and through mud that would stall most engines, without a miss in its rhythmic purr. Most remarkable of all is the fact that Schantin has the use of only one leg. Therefore, his machine was put to an extraordinary racking test, as his motor had to pull the rider and baggage at all times without pedal assistance. Another rider on a different make machine started with Schantin, but for a multitude of reasons gave up the journey while crossing one of the deserts of California.

The same kind of day-in-and-day-out service is yours for the asking.

WRITE TO-DAY FOR CATALOG B.



California Distributors	The Appeal Mfg. & Jobbing Co., Los Angeles.
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STRENGTH

in a motorcycle tire is the one basic quality that maintains the whole structure of tire durability.

United States Motorcycle Tires

are the STRONGEST TIRES IN THE WORLD

¶ They carry the load and stand the knocks better than other tires because of the aggregate of distinctive strong points built into them thru our exclusive co-operative, four-factory method of manufacture.

¶ United States Motorcycle Tires are *always* economical tires to use.

UNITED STATES TIRE COMPANY
NEW YORK

Dealers Everywhere



MOTORCYCLE

ILLUSTRATED

51 CHAMBERS STREET,
NEW YORK CITY.

PAID CIRCULATION THIS
ISSUE, 12,275 COPIES.

TRACK BUILDER SUGGESTS SAFEGUARDS

Official of Company That Erected Brighton Beach Motordrome Shows How Spectators at Board Tracks May Be Adequately Protected.

REFERRING to the board track situation in a recent interview, Arthur Jarvis, of the Coaster Construction Company, of New York, which built the Brighton Motordrome, stated that in his opinion the coming season will bring the big bowls into even greater popularity.

"It would not surprise me," said Mr. Jarvis, "to find a board track in every city of 300,000 inhabitants or over before May 1, 1913. What's more, these tracks will be as safe as it is possible to make them. Builders must see that their tracks are scientifically erected, properly banked, solid in construction and free from waves and rough spots. These precautions are due the rider, who takes his life in his hands every time he goes out to compete in a race. He is subjected to enough necessary risk without having any unnecessary risk thrust upon him.

"Traveling at 90 miles an hour, the rider covers 132 feet of the track in a second and a single track girder half an inch too high will cause a bump that may throw the speedster. At least the rider and machine will be thrown into the air for an instant and during that time the machine is unmanageable. Only by great skill and strength can the rider regain perfect control. Sometimes he fails to do this and an accident results.

"To construct the grandstands in a solid manner, having the line of vision so arranged that the rider is in full view at all times and so that the spectators will be fully protected should a machine run wild, is the main problem for track builders. All tracks now in existence should be changed so that spectators are safe at all times. Sketch No. 1 shows the precautionary method adopted at the Brighton Beach Motordrome, under the sanction of the Commissioner of Buildings of Brooklyn. The 2 x 12 board, almost at right angles to the track, will deflect any machine striking it and have a tendency to throw it into the infield. True enough, the rider will be in danger should he strike this board but he will have a far better chance to escape fatal injury than if he rides up on the fence and crashes into a pole.

"Sketch No. 2 shows an improperly built track. The track board is built up in front of the posts for some distance, thereby inviting some of the more daring riders to do spectacular stunts. This should never be encouraged and the track should be so built that such riding will be impossible. In sketch No. 2 the seats are arranged near the front rail and during the excitement of a race spectators will hang over the rail, thus taking chances on being struck by a rider or his machine. If an aisle of four or five feet is left between the rail and the first row of seats no one will hang over the railing, and spectators will have a much better chance should a machine get beyond control.

"The speed possibilities of a properly-built board track are startling. A 36-second mile may be expected almost any day and something even better may be developed before we are a great deal older."

H. D. RHOADS, of Akron, Ohio, is responsible for the board track suggestions embodied in the sketch at the left of the layout on page 18, and at the right is shown a type of board track guard-rail now being used in France. Rhoads would have tracks constructed to allow 25 feet of racing surface, with a black line to mark the danger point at the top. Above this he would have a section of the track boarding about ten feet high and curving slightly toward the infield. If a rider went above the black line and continued up on the ten-foot section he would ultimately fall

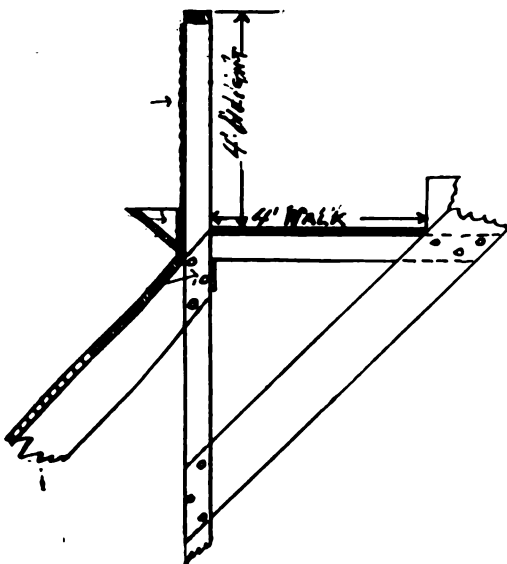


Figure I.

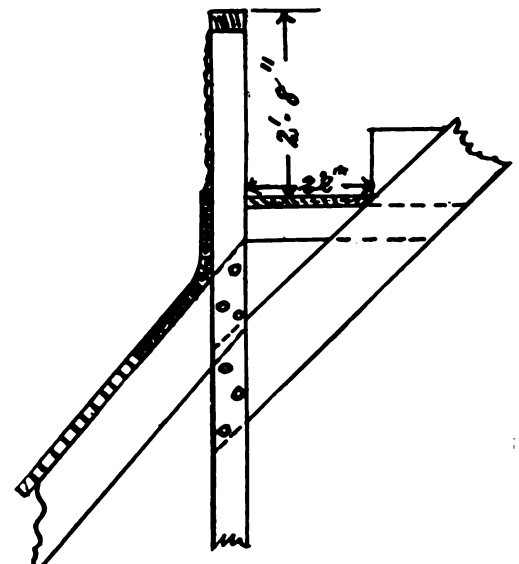
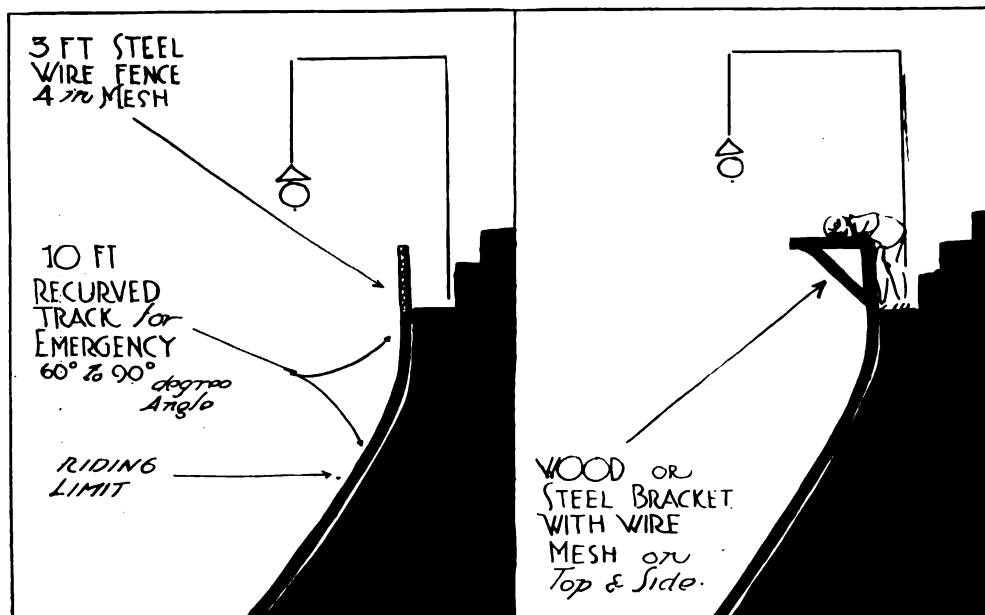


Figure II.



back on the incline. Obviously, this would be a serious matter for the racer, but the spectators would be in no danger.

The French guard-rail is built out at right angles to the ordinary railing at the top of the track, and spectators may lean out on this without being in danger. Should a racer ride high enough to jeopardize the spectators he will strike one of the braces of this table-like rail and be thrown without bothering those who are looking down upon him. This safeguard is quite costly, but it would seem to be effective.

HOT AFTER TRACK FRANCHISES.

THAT board track construction, which was lively enough to satisfy the most enthusiastic race follower during 1912, will be given even more remarkable impetus during the next six months is evident from plans that are now cropping out on all sides. In connection with these plans promoters are besieging the F. A. M. Board of Directors for restrictive franchises, and the solons of the national body are finding it anything but a simple matter to do justice to all concerned.

One of the most interesting phases of the present track situation involves Dallas, Tex., where two factions of promoters are waging a hot campaign to land a restrictive sanction. Clarence Linz represents one of the factions and his application for an F. A. M. franchise was filed prior to one which was received from S. G. Arthur, representing another party of Dallas promoters. It was hinted at first that George I. Kremer was to build the Linz track, but the promoters assert that they will have their bowl put up only by a contractor approved by the F. A. M. On the other hand Arthur and his backers have offered strong arguments to support their application. By way of proving that he is not a small-scale operator Arthur has followed his Dallas request with applications for restrictive franchises in San Antonio, Tex.; Atlanta, Ga.; Birmingham, Ala., and Havana, Cuba.

Within the last few days telegraph wires have been kept warm between Dallas and the points at which F. A. M. directors are located, as a result of the forwarding of a mysterious telegram from Dallas. The trouble-making wire read as follows:

"Am backing Arthur in Dallas motordrome. Have signed lease and must proceed. Earnest-

ly hope may not be forced to race as outlaw track. We have only profitable location, as

competitors admit. Already obliged to start construction to open for State fair on twelfth.

"EDWARD MAGNUS,
"c/o Anheuser Busch Brewing Co.,
"St. Louis, Mo."

As this wire embraced a covert threat to proceed as an outlaw track Chairman Thornley, of the F. A. M. Competition Committee, started an investigation and Arthur and his associates have been bombarding the competition chairman and the members of the Board of Directors with telegrams denying that they or anybody connected with them concocted the telegram in question.

At New Orleans there are more board track doings. M. F. Bramley, known to race followers through his connection with the Cleveland motordrome, and the recently opened St. Louis track, is seeking a restrictive franchise for the Louisiana city and he is desirous of obtaining the same consideration from the F. A. M. in Detroit, Kansas City and Cincinnati. It is understood that Jack Prince is more or less interested in all the track projects that are being handled by Mr. Bramley and the inference is that Bramley and Prince intend to build and operate a string of the big bowls for the 1913 season.



THE SHIELDS AND LOCHNER TEAM.
Winning Duet in Twice-Around-the-Clock Grind on the Brighton Beach Motordrome.



24-HOUR
SQUAD AT
BRIGHTON
MOTORDROME.

From left to
right — Shields,
Lochner, Cox,
McNeil, Eckel,
Spencer, Chapple,
Ayrault, Wray,
Thomas and
Vanberbury.

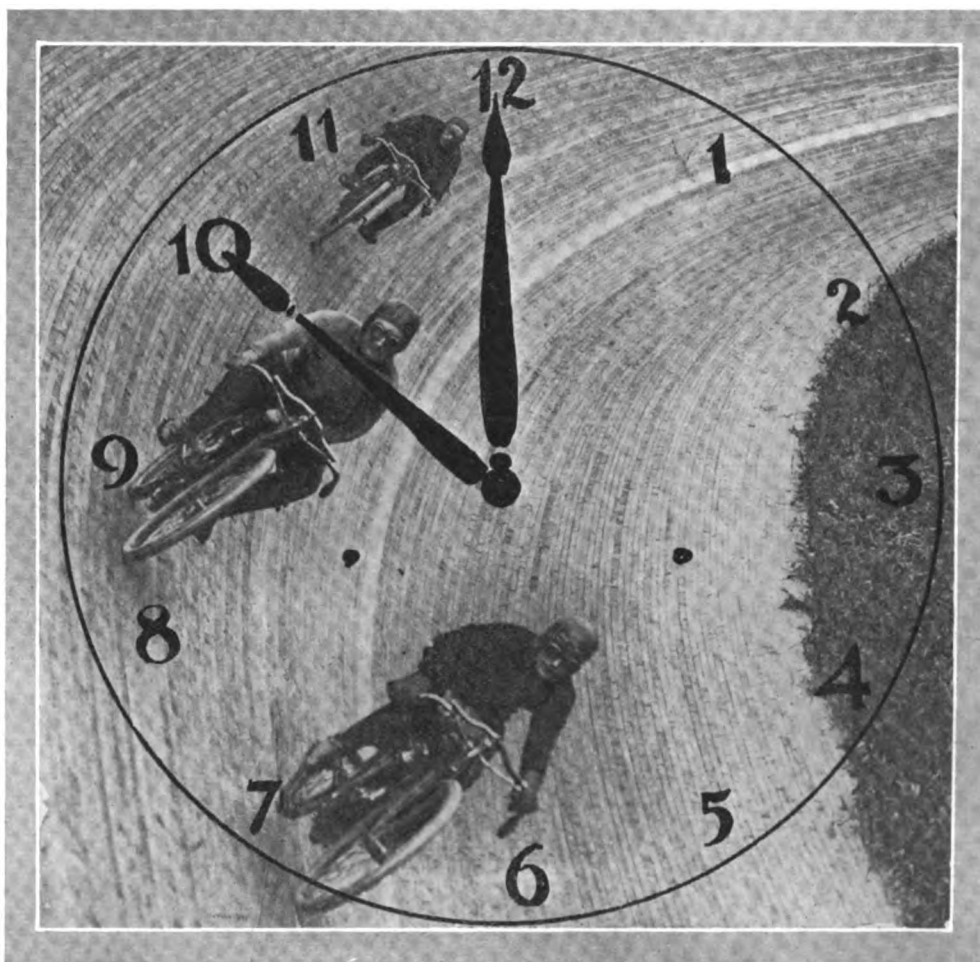


WHILE the twice-around-the-clock whirl on the Brighton Beach bowl, September 20-21, furnished some exciting brushes and a stellar performance by Lochner and Shields, the winners, it was with some misgivings that the fans accepted the final scores. Confusion resulted from the fact that all the competing teams were off the track for three hours, owing to the physical incapacity of some of the racers. In the meantime Ayrault and Eckels, who were not entered in the 24-hour race, were sent out to amuse the spectators. With a view of keeping up continuous scores and boosting the final mileage the track management estimated scores for the riders covering the hours they were off the track, and this added to the confusion.

The score for the first hour was as follows: Lochner-Shields, $67\frac{1}{3}$ miles; Chapple-Spencer, 67; Cox-McNeil, $64\frac{1}{3}$ miles; Wray-Vanderbury, 64 miles, and Thomas-Veditz, $63\frac{1}{3}$. Wray rode for an hour and eleven minutes before signaling his partner to relieve him. The long grind was started at 10:10 p. m., and during the night the boys plugged away steadily. At daybreak the riders complained of cramped hands and kidney pains. Cox suffered an attack of palpitation of the heart and was forced to retire. At this stage of the game lack of training showed itself clearly in all but the Syracuse team, Lochner and Shields.

These boys were easily the stars. They were credited with 1,374 miles and two laps at the close of the race, when the contestants had actually been riding 21 hours. McNeil and Eckel were in second place with 1,371 miles, and Chapple and Wray had 1,365 miles allowed them. The Thomas-Veditz team went out in the sixth hour and in the tenth hour Vanderbury retired and Veditz teamed with Wray. In the twentieth hour Veditz went out and Wray teamed with Chapple, Spencer being also out of the running. There was some dissatisfaction when Referee Pitman permitted Eckel, a fresh rider, to team with McNeil following the retirement of Cox, as it was argued that he had a considerable advantage over those who had been riding from the start. All the surviving riders took desperate chances in the last hour and the big crowd that turned out to see the finish was rewarded for its trip to Brighton.

A MOTORCYCLE run to Aurora, Joliet and Chicago was pulled off by the Elgin (Ill.) Motorcycle Club, on September 29.



BIGGER OUTPUT PROMISED.

AURORA, Ill., September 30.—Fire totally destroyed the stock of the Fowler-Carnes Company, manufacturers of motorcycle clothing, in this city on September 26. As soon as possible after the insurance adjusters have finished their work the company will resume business, and it is announced that the manufacture of motorcycle garments will be taken up on even a larger scale than in the past. In view of the fact that Fowler-Carnes business has been increasing at a record pace of late the company's new home will make ample allowance for the increased output, and the firm will be prepared to meet every demand made upon it for the coming season.

WHITNEY EXTENSION.

ANNOUNCEMENT is made by the Whitney Manufacturing Company, of Hartford, Conn., that work will be started without delay on its new factory building, which is to be 50 by 180 feet. The structure will be of steel and concrete and will be located between the frame buildings which now comprise the west wing of the plant. No changes will be made in the firm's line of high-grade chains for 1913, the present products having met all the expectations of manufacturers and riders.

ARUN to Williamsburg was recently held by members of the Norfolk (Va.) M. C.



FROM Boston to New York in a day; could we do it? The question had been in mind and on tongue for some weeks; like "Topsy," it grew. Ten days ago Monroe, my brother, laid out a schedule calling for twenty miles an hour with an occasional ten-minute stop for replenishments, and as I am sure others will want to take a try at it, I will write it out in full later in my story. It looked easy, that schedule. We had had the Excelsior for three months and my brother said she was well worked in and ready for anything. The Majestic torpedo side-car had been on the road for two weeks and none of the long rides we had taken had developed the slightest fatigue. So we made our plans for Sunday, September 15, and wrote Messrs. David Maholin, of Hartford; Shelton Sturges, of New Haven, and Stanley Kellogg, of Bridgeport, Conn., all Excelsior riders, telling them we would appreciate it greatly if they would be on the lookout for us five or ten miles north of their respective cities and pilot us through. We had no fear of losing the road in the open country, but were not so sure about the big cities. Some of these gentlemen met us and others deputized friends; all were kind and courteous. They helped us to gasoline and oil and refreshments and sent us through with despatch, and our appreciation of their assistance is as keen today as it was then.

Four a. m., from Boston! "Will we get up or stay up?" asked Monroe. We got up—with the aid of a trusty, if rusty, alarm clock—and in his room I heard him saying, "the cold gray dawn of the morning after is not the time for mirth and laughter." I called out to him that the "morning after" wasn't due for twenty-four hours yet. It was three o'clock. A steaming hot breakfast lifted our courage to the point where a San Francisco schedule would not have scared us, and we were ready for the road.

An Auspicious Start.

The car was well laden. An extra shoe was strapped on the back; two tubes, a package of small parts, a lunch box and an extra raincoat reposed in the front of the body. The clocks were preparing to strike four. Adieu said, we climbed aboard. I buttoned up the new storm curtain. "A kick and a clutch" and we slipped down Boylston street, past the Public Gardens and into Commonwealth avenue. The speed was 15-16 an hour, and this held until we passed the Packard Boston plant, three miles out, when it moved up to twenty. Commonwealth is a "saw tooth" road, and there are twelve miles of it. It is good in spots, but other stretches are full of

chuck-holes that try the outfit, motor and side-car, as well as rider's patience, to the limit. But the needle moved up and up, and, shades of Paul Revere! on the stretches through Auburndale and Naurembega it occasionally touches thirty-five.

Thus it is that we roll across the stone-arch bridge over the historic Charles River, twelve miles out, and when I tell Monroe that we are seven minutes ahead of the time called for on the card in my hand there is a grin on his face as he opens up and goes at the opposite hill with a roar that shows the first dash has done nothing more than warm the Excelsior up to its day's work. Weston, fifteen miles, with its green hills topped with Italian villas looking like fortresses in the gray light, slips to the rear, and we head down the Wayland road, a broad, smooth course that yields us forty an hour and then some on the straights. The car rides like velvet. "Rip" sits low to his work, watchful of milk wagons coming from lanes and by-roads and with an ear tuned for untoward sounds. South Sudbury, twenty miles; Longfellow's "Way-side Inn," twenty-one miles; and Marlboro, twenty-eight miles, are passed without incident other than the interest in the constant gain on the schedule, and at thirty-nine miles out we find ourselves fifteen minutes to the good.

Gaining on the Schedule.

So it was through Northboro, up the five hills into Shrewsbury, down the mile and a quarter hill to Lake Quinsigamond (these long Indian names before breakfast are good for the digestion), up the "Lake Hill" and into Worcester. Here William Farrell, of old road-racing fame, met us at City Hall with hot coffee and a bite; likewise gasoline and oil. *We were twenty-five minutes to the good!* Forty-five and a half miles in an hour and fifty minutes, and part of that ridden in the dark. I got out and stamped my tootsies, drank coffee and tried to look unconcerned. At this minute two autos full of friends rolled up. They had promised to see us through and down to Springfield and were greatly surprised at our early arrival, having planned breakfasting at a nearby "a la cart" (do you get it?) before we appeared, but they ate not. Ten minutes up and we were away again, with the clocks striking six as we flew out Main street, through Cherry Valley and to Leicester. Leicester Hill? Don't speak of it; it is unspeakable. It is the only teaser of a climb between Boston and New York. It is steep and rough, full of rocks, holes, dips, bumps and everything mean. It was slow work and Monroe walked the last hundred feet. I stayed

aboard, however, and in the glorious roads beyond, Leicester was soon forgotten.

Through Spencer and West Brookfield and the country between, the road wound among the green verdured New England hills, past rippling brooks and blue lakes shining in the early morning sun. We sped along the level stretches at from twenty-five to thirty-five miles an hour and climbed the hills at about twenty, taking it easily through the towns and giving the early risers a chance to read the banners with which we had the car decorated.

On a Scenic Route.

In West Brookfield we had our only tire trouble, a nice little blow-out, and as we had time to our credit, Monroe took fifteen minutes to make the change and then we were off again. Clocks in the towers of Warren and Palmer told us that we were still ahead of our schedule so we took it easily, drifting through North Wilbraham and into Springfield at 9 o'clock. Turning to the left at the foot of the State street hill, we found ourselves on the Hartford road, which runs down the East side of the river and this saved traveling through the streets of Springfield and allowed us to keep right up to the schedule. This stretch of road for twenty-six miles to Hartford was one of the prettiest, from a scenic point of view, on the entire trip. The banks of the Connecticut are lined with willows and occasionally a launch, off for a day's excursion, was seen flashing intermittently beyond the green. Monroe, however, had eyes for the road alone and was driving at a grand rate and paid little attention to anything but his work.

Through Longmeadow (100 miles) and Thompsonville (103), Warehouse Point (115) and into Hartford (122), at 10.30, showed us that the journey was more than half accomplished, with riders and Excelsior and Majestic De Luxe all in prime condition. Mr. Maholin, of the Hartford Motorcycle Club, met us at the big bridge across the river and showed us every possible attention. Time was precious, however, and we soon pushed on through Tracy and Wallingford, where the roads were none too good. We reached New Haven (160 miles), at 12 o'clock, seventeen minutes ahead of our schedule. Our escort here unfortunately had a blow-out, but under the circumstances was of quite some assistance. The policemen in the town, celebrated for harboring Yale College, were quite strict and slowed us down at every crossing. We lost our way once or twice and when one loses his way he usually loses his temper at the same time. So it was with us. We wandered into Fairfield ten minutes behind

our schedule and did not make it up until we reached Norwalk (191 miles), after which the going was better, so that we found ourselves in Greenwich, the last town in Connecticut, at 2.38, just on schedule time.

On the Final Stretch.

Then to Port Chester (207 miles), Rye (209), and we began to run into the worst roads on the trip. They were worn out macadam, full of chuck-holes and ruts, and to add to our discomfort the automobiles were as thick as they would be in a country town on parade day. Sometimes three or four would leave the main road in a procession for some other highway and one of these strings of cars we followed and so became lost again. At this time we were fifteen minutes ahead of our schedule and approaching the New York City limits. Another automobile overtaking us and noting the banner on our car, inquired if we had driven from Boston and if we were on our way to New York. I replied in the affirmative, whereupon they informed us that we were a considerable distance from the main road and offered to pilot us in. Certainly no kinder act could have been performed at that time, and we accepted with hearts full of gratitude as time was drawing short and our nerves were keyed up for the finish.

This good Samaritan proved to be C. W. Tate, of the Case Automobile Co., 1006 Broadway, New York, to whom we wish again to express our heartfelt thanks. He acted as pacemaker for us directly to Columbus Circle, at 59th Street and 8th Avenue, to which point we were followed by a party of motorcycle riders who had "hooked on" at different points in the last ten miles. Thus we believe we put up a record which will prove of interest to all practical motorcyclists; Boston to New York with motorcycle and side-car in daylight, and with time to spare. Monroe's weight is 165 pounds, mine 123 pounds. The Majestic side-car and extra equipment weighed about 100 pounds.

The schedule and route called for 240 miles, but through detours the distance covered amounted to 248 miles. With not a moment lost for repairs either to the Majestic or Excelsior and a fine day's sport, we finished up with a feeling that there is a substantiability to motorcycling and side-carrying, understood and appreciated only by those who have tried it out to the limit, as we think we did that Sunday.

The Full Schedule.

Due to Arrive	Towns	Total miles
4.33	Boston to	
	Charles River	11 13
4.42	Weston	3 15
4.51	Wayland	3 17
5.00	S. Sudbury	2 20
5.20	Marlboro	8 28
5.42	Northboro	6 34
5.50	Shrewsbury	4 38
6.12	Worcester	6 44
	(10 minutes stop)	
6.40	Leicester	6 50
6.55	Spencer	5 55
7.13	Brookfield	6 61
7.22	W. Brookfield	3 64
7.34	Warren	4 68
8.07	Palmer	11 79
8.27	No. Wilbraham	5 84
9.00	Springfield	11 95
	(10 minutes stop)	
9.25	Longmeadow	5 100
9.34	Thompsonville	3 103

10.31	Hartford	24 122
	(10 minutes stop)	
11.04	Berlin	11 133
11.22	Meriden	6 139
11.29	Tracy	3 142
11.38	Wallingford	3 146
12.17	New Haven	13 160
	(10 minutes stop)	
12.44	Milford	9 167
12.59	Stratford	5 172
1.11	Bridgeport	4 176
	(10 minutes stop)	
1.26	Fairfield	5 181
1.56	Norwalk	10 191
2.20	Stamford	8 198
2.38	Greenwich	6 204
2.56	Port Chester	3 207
3.02	Rye	2 209
3.23	New Rochelle	7 216
4.35	Columbus Circle	
	New York	24 240

CHICAGO MACHINE STOLEN.

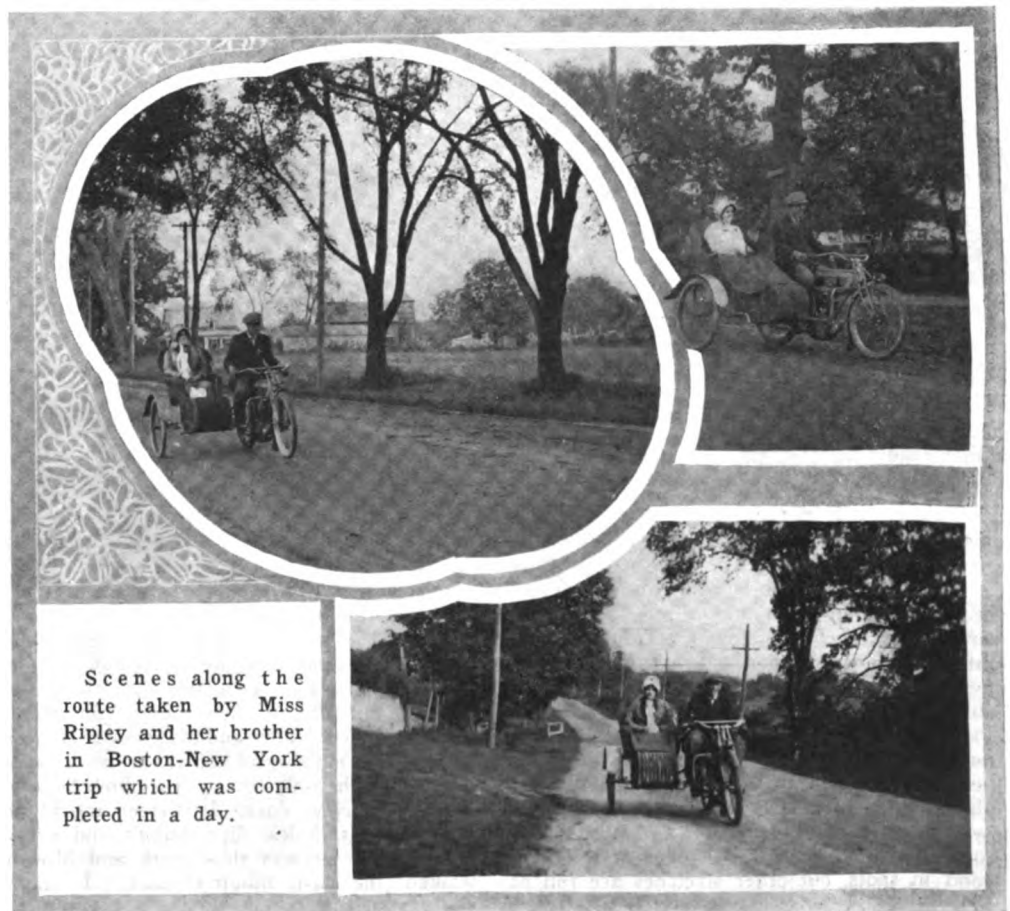
A 1912 twin Excelsior was recently taken from the residence of Edward Matts, 723 West Sixtieth street, Chicago, Ill. The motor number is 36231, state license number 4905. The machine is equipped with a Simplex spring tandem attachment, Old Sol head-light and Perfecto tail lamp; aluminum chain-guard and tool-box on tank. A bull-dog head was fastened on the front mud-guard. Address communications to the Angsten-Koch Company, 348 W. Garfield Blvd., Chicago.

A CORRECTED ADDRESS.

IN the last issue the address of the Angel City M. C., of Los Angeles, was incorrectly given as 433 Fifteenth street. This proves to be the headquarters of the Oakland Motorcycle Club and the address of the Angel City squad is 132 West Twelfth street, Los Angeles.

A PRODIGIOUS SIDECAR RIDE.

BRITISH cycling can claim the longest-distance champion of the world in Harry Long, who, after riding gigantic distances on a pushbike in previous years rode to the Triumph works early in 1911, bought a stock roadster, and rode it 40,000 miles before last Christmas came around. This year he has gone one better by covering 20,000 miles with a 4 h. Singer and sidecar easily inside six months. Of course, only the distance is checked, his stops, repairs, and replacements being a private affair of his own, but the mere piling up of such a mileage is no small feat, especially when I add that he hugs the coast roads, which are notorious for hills and bad surface. On this sidecar jaunt he has covered every inch of the nearest practicable roads to the sea all the way round Great Britain and Ireland. His little daughter occupied the sidecar, which is the first of a new "underslung" type, with its chair depending by springs below the axle. Harry got through without breaking a valve, and he has several tips worth hearing on the point of saving the valves. He always inserts a new valve for 100 miles or so as an inlet valve, to get it acclimatized to heat, as he calls it, before transferring it to the exhaust tappet. (Note: Almost all British engines have interchangeable inlet and exhaust valves.—Ed.) He always shuts the throttle to slow down, in preference to raising the valve-lifter. His machine has a two-speed countershaft gearbox, of the sliding dog type, and is unique in that the drive from the engine to the gearbox is via an enclosed shaft, the final drive being by chain. Perhaps the most informative item of his ride is the excellent behavior of the Wood-Milne tires; Harry employs the heaviest covers that money can buy, and keeps them pumped iron-tight.



Scenes along the route taken by Miss Ripley and her brother in Boston-New York trip which was completed in a day.

From PORTLAND to PORTLAND



FOLLOWING is the final installment of the article written by Joseph P. Shantin, to describe his motorcycle trip from Portland, Oregon, to Portland, Maine. It carries the rider from Duncan, Arizona, to his destination, which he reached in fair time with colors flying. He is now on his way back to Oregon.

After traveling from Duncan, Arizona, to a point 10 miles east of Lordsburg, New Mexico, on June 28, I experienced magneto trouble, due to a short-circuit from water. When the water dried out I rode on, only to experience another short-circuit a few miles down the road. As it was getting dark and threatening rain I hustled back to Lordsburg for the night. The following day I rode to El Paso, Texas, 138 miles. The roads were bad most of the way, and I rode the railroad ties from Lanark on. In El Paso I looked up the Merkel agency and had my broken seat-bar brazed. I remained in El Paso over Sunday, June 30, and on July 1 proceeded to Glencoe, New Mexico, 168 miles.

I took along an extra can of gasoline that morning, but lost it and then returned and purchased a half-gallon can over which I kept better watch. I had bad roads and sand to Alamogordo, and then better going to Glencoe. Forging a creek four times helped to break the monotony.

July 2, to Roswell (84.0 miles). I had rocky hills most of the distance and had to ford one creek. I remained in Roswell that afternoon, taking a little ride with W. C. Bucy, Merkel agent there. The run on July 3 took me to Bronco, Texas (95.5 miles). There was a heavy thunder storm the previous night and I struck several miles of muddy road which made traveling difficult. I also had about ten miles of bad sand to go through. Fifty miles from Roswell I struck the high-water mark for gasoline, the price being fifty cents per gallon.

Surprising the Natives

On July 4 I reached Plainview. I lost the small wheel off my speedometer at Brownfield and found out that traveling was very inconvenient without it. Four of the towns on the route had big Fourth of July celebrations, and it was amusing to see how many people had never examined a motorcycle before. My machine seemed to fascinate them. I had

intended to stay in Plainview over night but all the hotels were full and I tried to reach the next small town. This I was unable to do, and I was obliged to pass the night in a farm house.

On July 5 I rode to Dumas. Traveling was bad for a time and then I had better roads. On July 6 I reached Liberal, Kansas, and on the following day I proceeded to Dodge City. I had five miles of sand and then had to ford a small river. There were a few good roads but most of them were rough from just being dried out after the rain. I arrived in Dodge City shortly after noon, and remained overnight waiting for mail.

July 8, to Ogden (about 275 miles). I got an early start and had fairly good roads. I broke my record that day as I covered about 275 miles, according to the road maps. I ran out of gasoline and had to push the machine a mile to a farmhouse where they kept an auto. There I got off the Santa Fe trail and went north through Clafin, Ellsworth and Salina. July 9; to Kansas City, Mo. (about 150 miles). Good roads, with a few exceptions. I took my time, stopping at the Merkel agencies in Topeka, Lawrence and Kansas City. There I received my first mail since leaving Phoenix, Ariz.

An Emergency Belt Repair.

On July 10 I stopped over in Kansas City with friends, and the next day I continued to Marshall, about 95 miles. On July 12 I rode to a point seven miles east of Wentzville (about 167 miles). I had rough, and in some places, muddy roads.

July 13, to St. Louis, Mo., about 45 miles. I had not traveled far in the morning when my belt broke and I had a little difficulty in getting it to hold with wire. After this I reached St. Louis without further trouble. As

I did not care to take any chances I put on a new tire as soon as I reached St. Louis, one of the old ones being in very bad shape. I made the necessary repairs on my speedometer, and remained in the city over Sunday and Monday.

July 16, St. Louis to Teutolis, Ill. (114 miles). The roads were good, except in two places, one between Troy and St. Jacobs, where I had to go through quite a little water and mud, and the other when I took the wrong road near Altamont, getting into about ten miles of very rough and muddy riding.

July 17, to Terre Haute, Ind., 70 miles. I had muddy roads to Greenup and when I reached there it commenced to rain, so had to lay over for four hours. I left about 1 p. m. and had muddy roads. At times the water was too deep to get through and I had to make long detours. Finally I got into a stretch of sticky clay, where it was impossible to make progress, and I was about to turn back to get on the tracks, when a good-natured farmer came along and offered to give me a lift. I accepted his offer, loaded the machine into his wagon and rode for a mile and a half.

July 18, to Richmond (138.1 miles). I had good roads all the way. I put in new rebound springs in forks and stopped for a short time at the Merkel agency in Indianapolis, also at the plant of the United States Tire Co.

Visit to Merkel Factory.

The next day I reached Columbus, Ohio (113.1 miles), over good roads and except for running a nail through my rear tire, I had no trouble. On arriving in Columbus I looked up Mr. Edwards, the Merkel agent, and Secretary Gibson, of the F. A. M. While there I attended the Merkel gathering at the convention and went to see the races at the motordrome. I stayed in Columbus over July 20, and got under way about 11 a. m. on July 21, with a number of Merkel riders who were going to visit the factory at Middletown. We left after a heavy shower and the roads were very slippery. A few miles east of Springfield I broke one of my control wires, which I was unable to fix, so I had to work the throttle in order to continue. After leaving Springfield I was separated from the rest of the party and did not reach Middletown that



"Many of the natives had never before seen a motorcycle."

night. I was out early the next morning and by 7 a. m. had reached Middletown. I visited the Merkel factory and was shown the processes of manufacturing a motorcycle and had my machine completely overhauled. I stayed over the next day and received generous treatment at the hands of the Miami Cycle and Manufacturing Company.

Slow Progress on Poor Roads.

I did not leave Middletown until July 27. I found good going to Chillicothe and rode a short distance by moonlight. On Sunday (July 28) I covered 113 miles over muddy roads, and had considerable trouble with my magneto. I crossed the Ohio River at Parkersburg and continued on to Murphysville. I had not gone far the next day when I broke the main saddle bar on my machine, which made riding uncomfortable. I was delayed four hours on account of rain and then the roads were slippery again. I was able to make only sixty-five miles that day and remained at Salem till morning. The following day I passed through a section which had been heavily flooded; the roads were all washed out, and in addition I had several creeks to ford. My magneto gave more trouble and I ran out of gasoline and had to walk over three miles to the next town. I stayed at Rowelsburg that night and the proprietor of the hotel, who owned an automobile told me how to remedy my magneto trouble.

On account of rain I did not get away till late the next morning and had poor roads all day. I left my camera at the hotel at Rowelsburg and sent word back to have it shipped ahead. On August 1 I left Capon Bridge, where I had stayed overnight and although the roads were hilly they were good and I made fair time to Gettysburg. I spent a few hours viewing the battlefield and the next morning I left for Washington, D. C. I stayed over in Washington sight-seeing, and made the acquaintance of A. W. Lafferty, Congressman from my home town.

In Portland at Last.

I met a couple of riders who were going my way as far as Philadelphia, so I left with them on the afternoon of the fourth. At Elkton I left my companions and continued on to Wilmington, where I stayed over night. I set out for Newark, N. J., the following morning, passing through Philadelphia and Trenton. At Trenton I met A. Karekus, the Greek who is traveling around the world on a Flying Merkel. I reached New York the following afternoon, August 7.

I left for Hartford, Conn., at noon on August 14 and found good roads except through the cities. When I was ready to leave the next morning I met an Indian rider from Wilmington who was going to Haverhill, so I had company to Boston. We stopped at Springfield to visit the Hendee Manufacturing Company, and then went on through Westboro, where we visited the F. A. M. headquarters and met Dr. Gibson. During the day McCartney, the rider from Wilmington, decided to go to Portland with me so we planned to go from Boston by boat. However, on arriving in Boston we were informed that motorcycles must be crated and we therefore decided to continue on our machines. McCartney wanted to visit some friends so I went on to Somerville, where I remained over night. I arrived in Portland at 1.30 p. m. the next day. My total mileage from Portland, Oregon, to Portland, Maine, was 5,964 miles. I stayed in Portland only a few hours and then left on the return trip.

BLAZING MACKINAW TRAIL

BY MAX
BURKE

TALES of severe motorcycle tours are becoming pretty common these days, but I am convinced that a recent trip through the Mackinaw division in my State (Michigan) is far enough out of the ordinary to warrant a brief story. I entered upon the journey in something of a joking mood, agreeing to ride without tools or a tire pump, although my route lay through a country where motorcycles were practically unknown and where roads could only be guessed at. Some of my friends questioned my sincerity and that clinched my determination to go through with the undertaking. Accordingly, I pulled out of Detroit on my Emblem one Sunday recently, minus the aforementioned tools and pump, and headed for the Mackinaw country.

For thirty miles out of Detroit the roads were good; then I struck sand, clay, deep

down again. I spent five and a half hours in riding from Grayling to Standish, 52 miles, and when I finally reached Mackinaw City I felt like a Glidden pathfinder. No one knew me there, but I was given a hearty welcome just the same.

I remained at Mackinaw only a few hours, and then took up the return trip by a different route. It was longer than the out trip, and harder, if such a thing could be possible. When I reached the Saginaw "turnpike" I discovered a pile of apples and potatoes by the roadside where they had been dumped, presumably by a farmer whose wagon had broken down under the heavy going. Both farmer and wagon had disappeared, and as I wanted something to show for my journey I took a two-bushel sack of potatoes from the pile and strapped it between my saddle and the tandem seat on the Emblem. Then I placed a bushel of apples in my suitcase, taking out the clothing and tying it to the machine here and there. I left a note for the farmer, explaining the conditions and telling him to mail me a bill for the apples and potatoes, but as I have not heard from him I take it for granted that he did not go back after his load.

Carrying the Double Cargo.

When I got under way with my heavy extra load I was doubly hampered, and the terrible roads almost forced me to abandon my sack and suitcase at several points. However, I knew it would add greatly to my achievement if I succeeded in getting home with them, so I stuck out the fight. To recount all my experiences on that return trip would require a serial story, but I lived through it and pulled into Detroit after six days on the road.

I used eight and a half gallons of gasoline and five quarts of oil on the trip. This may sound like very light consumption, but it is a true statement as far as I am able to calculate. The photograph shows my mount with the sack of potatoes on the rear and the suitcase carrying the apples strapped on the handlebars. The banner covering the case bore this inscription: "From Detroit through the Mackinaw Division." I think it is also worthy of note that my machine is a single.

AN INSPECTOR'S MILEAGE.

J. M. JACKSON, an inspector of construction work for the Union Electric Light and Power Company of St. Louis, Mo., who makes his daily rounds on a motorcycle, says he rides from 9,000 to 12,000 miles a year.

FRED JOHNSON, of Angola, Ind., is making a tour of Ohio on his new twin Indian in company with Ivan Clem.



Max Burke, Who Toured Unknown Trails into the Mackinaw Division.

ruts and loose stones, and this was the kind of going I had for a distance of 342 miles. I gave up three days to this trip, riding until 8 o'clock each evening. In some places the roads were so bad that I walked and used my clutch to let the machine pull itself through. The towns were hardly worthy of the name, and the natives informed me that my motorcycle was the first to appear in this section. They looked upon it with awe.

Some Record-Breaking Grades.

From Pinconing to Standish, 102 miles, the roads were little more than trails. I had never visited these places previously, by any means of transportation, and knew nothing of the route save what I could learn from town to town. The hills over Mackinaw Division are steeper than any others I have seen, and after reaching the top in some cases it gave me a sudden scare to think of riding

HOW THREE TENNESSEANS *Saw* NIAGARA

GEORGE E. DRENT

DESIRING to spend my vacation in what I consider the only ideal manner, on a motorcycle tour, I succeeded in interesting Ben L. Brachy and Will E. Davis, of my home city (Nashville, Tenn.), and as none of us had ever been to Niagara Falls or over into Canada, we decided upon the Falls as our destination. We left Nashville on Friday, August 2, and had what might be termed a fair road until we struck Kentucky at a point near Franklin. From this place to Bowling Green, the roads were considerably worse and by the time we reached the latter place we were in fine fettle for a chicken dinner, which, fortunately, we were able to obtain.

Some Hard Traveling.

From Bowling Green to Louisville, we had no roads at all. They may have been highways many years back, but now they are simply streaks of clearing through a rolling country, covered by stones as big as your head. The natives, however, did not seem to consider these bad roads at all; in fact, they thought they were rather above the average. They may have been for heavy farm wagons, but certainly not for motorcycles. However, we reached Louisville without any casualties the first night, and the next day we went to Latonia, Ky. We stopped at Frankfort and visited the state Capitol, and found some mighty good 22-year old Bourbon whiskey, the latter being obtained at the Capitol Hotel, which some years ago was the scene of the famous Goebel shooting.

Visited Merkel Plant.

The third day we left Latonia about 9 a. m., and rode over to Cincinnati, Ohio, where we called to see Ferd. Stenger the Flying Merkel agent. Then we proceeded to Hamilton for dinner. Hamilton proved a very uninteresting town, despite the fact that it is the county seat of Butler County, so we didn't tarry there, but headed toward Middletown, the home of the Flying Merkel. We arrived there about 2.30 p. m., rode around the town for a while and then went out to the Merkel factory. As it was Sunday there was nobody on hand except the watchman, who entertained us until evening. Early the next morning we went out to the plant again, where we were accorded a hearty welcome.

Leaving Middletown, we went to Springfield. The roads from here were rather good except for the dust. We spent the night in Springfield and had splendid roads straight on in to Columbus. We did not stop long at the latter place, but pushed on to Sandusky, arriving there at 10:30 p. m. The next morning we set out for Cleveland, and here is where we had the worst roads in the whole trip. There is sand nearly a foot deep in some places, and each of us took a spill or two. When we got to within about 17 miles of Cleveland, the sand was almost impassable, but just when we were ready to give up in disgust we ran onto a fine brick road and forgot all about our previous troubles. From Cleveland on to Buffalo, then to Tonawanda we had splendid roads, but from Tonawanda to Niagara Falls, rain and mud were encountered. When we reached Niagara Falls, we rode around the great gorge on the American side and then went over to Canada. We spent one night and part of two days at

Niagara and decided that as we hadn't had enough vacation we would ride back. Accordingly we turned southward, going through Tonawanda, Buffalo and thence on through Westfield and Lake Chatauqua, and on to North East and Erie, Pa., retracing the road back to Cleveland through Springfield, Ohio. At Springfield, however, we made a detour through Indianapolis and then went straight down through the state to Louisville, Ky., and from there over the same roads home.

A Satisfactory Summary.

We arrived home Sunday, August 18, all feeling much better for the trip. I rode a 7 h. p. belt-drive Flying Merkel, as did Brachy, while Davis rode a 4 h. p. Harley-Davidson. The summary of our troubles and falls was as follows: I had three falls and two blow-outs, necessitating buying a new tire at Cleveland. Brachy had two falls and one blow-out, and was also forced to buy a new tire. He bought his in Indianapolis. Davis had two falls and no tire trouble whatsoever, although he did have a lot of trouble with his flat belt, particularly on some of the steep hills which we encountered.

CLEVELAND CLUB NOTES.

AT the last meeting of the Cleveland M. C., the General Publishing Company was awarded the sole right to publish the Cleveland M. C. Directory for 1912 and 1913. This little booklet gives the name, street address and make of machine and horsepower of all registered motorcyclists in Cleveland.

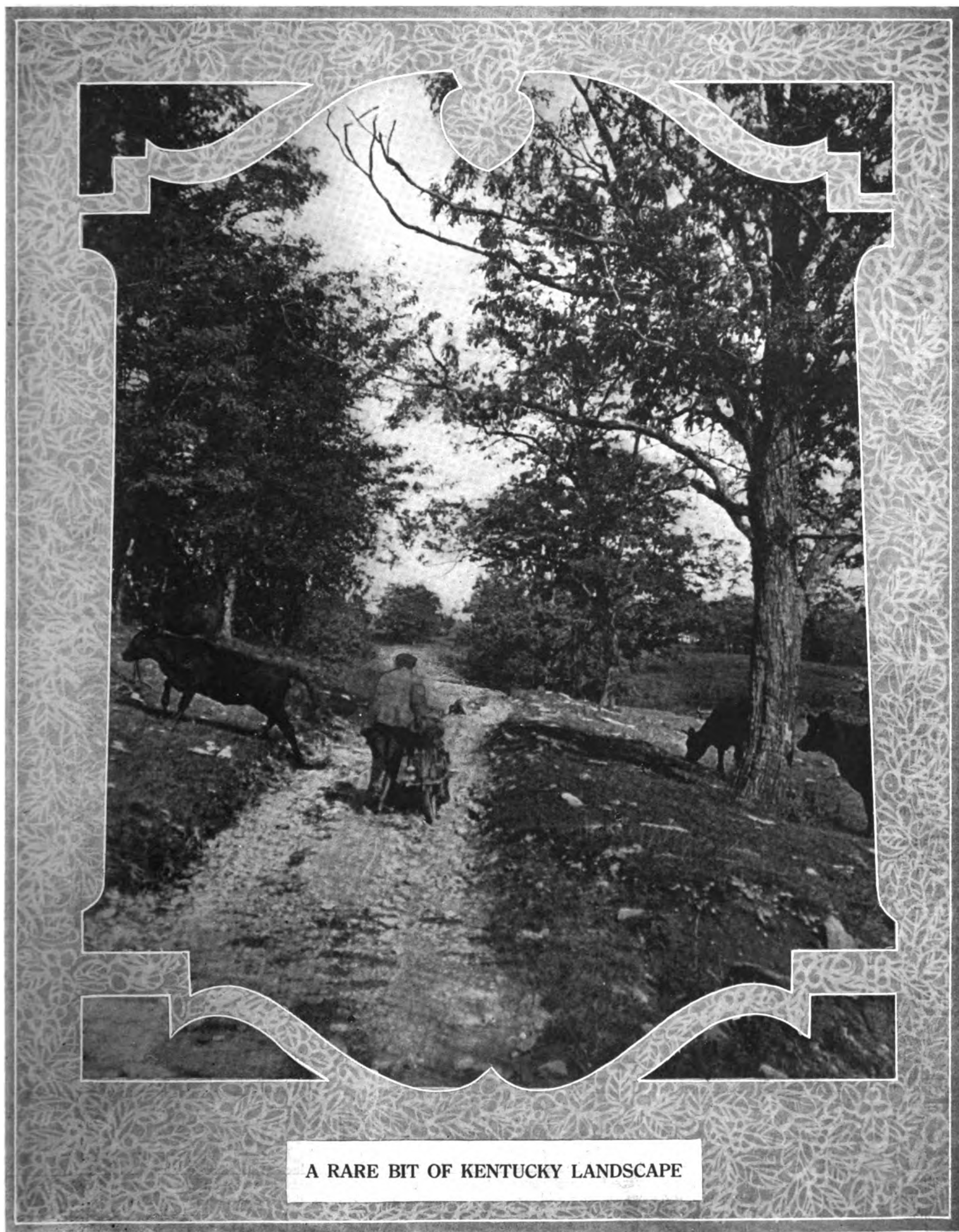
Probably no club in the country has had a more profitable year than the Cleveland M. C. The club has held but two race meets this season, from which it derived a revenue, but its financial condition is twice as good as that of a year ago.

A letter from the police department of Cleveland notifying the Cleveland M. C. that a rigid enforcement of the traffic ordinance is to be expected was received by the club as a warning recently.

THE newly organized Aberdeen (S. C.) Motorcycle Club recently made a run to Hecla, where the riders were guests of the Hecla Commercial Club.



Nashville Riders on Tour to Niagara Falls.



A RARE BIT OF KENTUCKY LANDSCAPE

INTERNATIONAL TOUR

DONALD
McKIE

Part
Five

IN the present instalment of his article covering the European tour of the Atlanta tourists, Donald McKie deals with roads and customs in Germany, Austria and Switzerland. He reports comparatively little trouble with customs officials and states that the highways of Germany could hardly be improved upon. Mr. McKie's next article will deal with a trip over the famous Simplon Pass in Switzerland.

Vienna is a very interesting city and we spent considerable time in sight-seeing here, after leaving our machines in an out-house of the hotel. The latter arrangement proved costly for some person broke every bit of glass on them, such as the lenses in the lamps and the dials of the speedometers. A horn bulb was also taken and the gasoline was drained out of one of the tanks. We were mighty sore, but could not locate the offenders. Two roads lead out of Vienna; one following the Danube, while the other goes more to the south. We decided to take the latter and had some difficulty in finding the road. Finally we struck it, but we had not gone far when it started to rain. As a result when we reached Melk we decided to stay over till morning.

The roads were still wet and in bad shape when we started out the following day, and we had to use care to avoid spilling. We reached Linz, another prosperous town on the Danube, about three o'clock and as it was raining again we remained there overnight. While we were held up we cleaned our machines, so as to be ready for the mountain climbing ahead of us. We got started about noon the next day and had fine roads and excellent scenery. The mountains of Tyrol, to the south, make a very picturesque outlook. There were some winding hills to climb, but with 7 h. machines we made quick work of them; even the motorcycle carrying double had no trouble. We continued without trouble to Salzburg, the last town we struck in Austria. It is entirely surrounded by mountains, many of them being snow-capped.

A few miles out of Salzburg we passed the Austrian customs office, without stopping. We had entered and left Austria without any license or triptyque and had not been interfered with. Later we came to the German customs office. Here we were stopped and asked to show our papers, and we promptly produced our steuerkarte. For a time the officials insisted that we deposit a certain amount for our machines, something over 300 marks, but after considerable arguing they stamped our cards and allowed us to go on. All motor-



cyclists contemplating a European trip will do well to make note of this and hold out against such demands.

On Good German Roads.

Immediately upon entering Germany, traveling becomes very good. For a number of miles the road follows the banks of a large lake, the name of which we were unable to learn. The automobiles on the continent go very fast and you must be continually on the watch to avoid accidents. The distance between Salzburg and Munich is seventy-six miles, with only a few small villages en route. There were only three hills of any size and

they were climbed without trouble. We remained in Munich for a couple of days. While there we visited the German Museum where we saw a motorcycle built in 1885, called the Daimler, and another, the Drierl, made in 1898. Both were very interesting mechanical specimens and as might be supposed they formed quite a contrast with our machines.

Leaving Munich is very easy, as the main road goes straight out, something unusual for a European route. We did not get under way until 5.30 p. m., and after riding 35 miles we stopped at Landberg. Here we had to pay twenty-five cents, or ten pfennig, to enter the city. It rained from the time we entered the city until the next day. In the morning we started out, despite the rain. We had good roads and the time passed quickly. About noon the rain ceased and we had pleasant riding. We passed Lindau, at the eastern end of a large lake, known as Boden See. Here one can see across to the Austrian shore and discern the Austrian Alps in the distance.

It was raining again when we left the next day, but after a time the storm passed and the roads dried very quickly. Our course lay around the Boden See for many miles, and a short distance beyond Singen we again encountered the German customs, where we had our cards stamped. Further on we came to the Swiss customs office. We handed the officials our Auto Cycle Union cards (English), but were informed that this association is not extended the touring privileges. Our many other credentials were ignored in like manner and we finally had to deposit 28 francs or \$5.60 as security on our machines, with the understanding that this would be returned to us upon our leaving the country.

Viewing Good Scenery.

Switzerland's reputation naturally leads one to believe mountains are to be encountered from the start, but such is not the case. We rode for many miles over excellent roads. In Shaffhasn we saw the famous Rhine. Its water is of a peculiar color, unlike any we had previously seen. A short distance from the town may be seen the Rhine Falls, and the tourist should not miss them. After leaving the falls we were riding along at a good clip, when we were stopped by a farmer. He wanted to see our German driving license. As he could not show any badge we were reluctant to show our cards, but finally found that we were on a short stretch of German soil. We were soon traveling in Switzerland again and the next town we came to was Eglisna. On entering we went down a long winding hill and again saw the Rhine. An

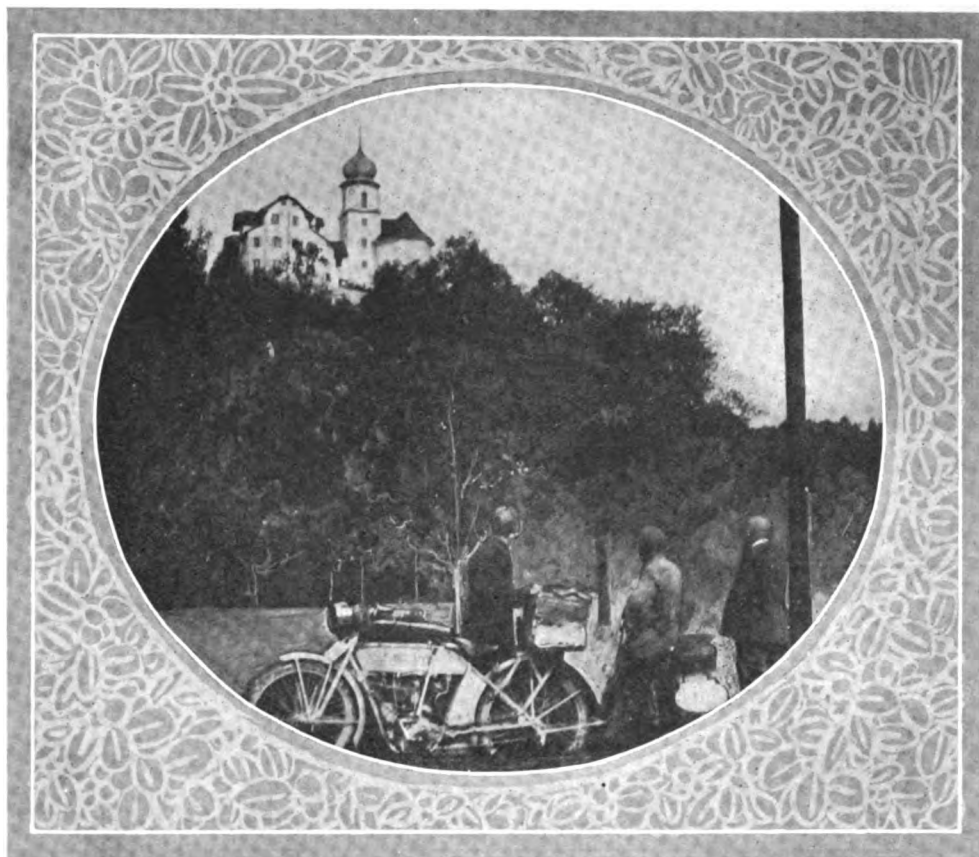
old fashioned wooden bridge spans the river at this point. A long hill on the other side of the river had to be climbed, so we forgot the scenery for the time being and continued our trip. We decided to spend the night at Buchloe, a town about fifteen miles from Zurich.

We had not ridden far the next morning when we heard the roar of a cannon. We soon found that this hub-bub was caused by the Swiss army, which was engaged in its annual war maneuvers. We spent about two hours watching the "battle" and then continued to Zurich, reaching there before noon. Zurich is located at the foot of the mountains on the edge of a large lake. After riding around the city for a while we decided to leave and had some good hills to climb.

In the Mountains at Last.

The distance between Zurich and Luzerne is about forty miles. The road runs between high mountains, and is good, but full of curves. Going into Luzerne we were surprised to see a monoplane, presumably an Antoinette, making an exhibition flight over the lake. Luzerne is noted for its beauty and is consequently a mecca for tourists. This has a tendency to make prices high, so after looking around for some time we left just before dark. We located for the night at an inn outside of the city.

We continued on our way the next morning, with mountains all around us, and occasionally we came to a water-fall. We had good going to Bern, another attractive city and then to Lausanne. The latter place is purely a tourists' resort. The only place worth mention before we reached Lausanne is Tribourg, featured by true Alpine scenic splendor. We also encountered a severe hill, right in the city, with the usual rough pavement. From Lausanne we followed the LacLamon to Vevey, the home of Peter's chocolate. We were now approaching the real mountains, but as the road is in the valley we had no bad hills to climb. Out of St. Maurice there are many striking sights to be seen. At Martigny one can take the electric cog road to Chamonix, in France. From there may be seen Mt. Blanc, the highest Alpine peak.



We crossed and recrossed the Rhone and finally reached Brigue, where the famous Simplon Pass starts. We were detained here by the gendarmes, and having no International pass, had to pay two francs, or forty cents. This amount was required for each machine to cross the pass. From this police station to the next is only a little more than twenty-five miles, yet the officials force you to take two hours and twenty minutes to make the run. In other words the speed limit is eighteen kilometers or less than twelve miles per hour. After getting the time stamped on our tickets and making a short stop at a

cafe we were ready to ascend the famous Simplon Pass.

(To be continued.)

NEW ERA RECEIVER NAMED.

DAYTON, Ohio, Oct. 1.—J. D. Platt, Jr. has been appointed receiver for the New Era Autocycle Company, of this city, on the application of its president, E. Frank Platt. Inability to make collections contributed to the firm's action. Despite the present announcement it is reported that the company's assets exceed its liabilities. Two notes given by J. D. Platt and secured by E. F. Platt are also said to have had a bearing on the application for a receiver. These notes are unpaid and overdue. Other notes given by the company aggregate \$45,000. These will become due soon. The chief assets of the company, according to the petition for receivership, consist of the plant and its equipment. E. F. Platt asks that the notes endorsed be paid and to this end he wants the visible assets converted into cash, and the stockholders to share. The capital stock of the company is \$300,000 paid up. E. F. Platt was made president a short time ago. The receiver's bond was fixed at \$10,000.

BUFFUM'S CONTRADICTION.

EDWARD BUFFUM, of the Hendee Manufacturing Company's sales staff, announces that there is absolutely no foundation for the report, given credence in some quarters, that he is to leave the Wigwam to accept the position of sales manager for the Reading Standard Company, recently left open by the resignation of W. F. Remppis. Mr. Buffum disclaims all knowledge of the source of the announcement.

MR. AND MRS. THOMAS F. STONE, of Madison, Ill., recently completed a 2,000-mile honeymoon trip on a motorcycle.



PHILADELPHIA BANQUET.

BY way of celebrating the winning of prizes in the sealed-time run from Philadelphia to Stone Harbor, N. J., and in the races held the next day on the beach, the Harley-Davidson Motorcycle Club, of Philadelphia, recently

gave a banquet and smoker. A large crowd attended and it was unanimously declared a big success. Among the prizes won was a large silver cup, the club trophy; while six smaller silver cups, a gold watch and five stick pins constituted the winnings of individual riders.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

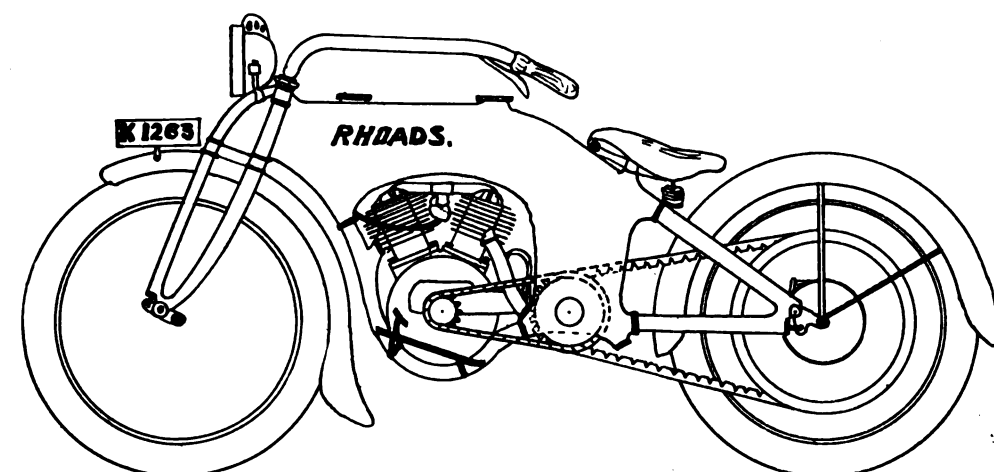
Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.



AN IMPROVED OUTFIT.

A VARIETY of devices go to make up this improved model of a touring motorcycle. The motor is a 9 h. twin, with combination drive (belt and chain), and a two-speed gear is fitted on the countershaft. The rear wheel is spring-suspended, having a rocker pivoted to the rear fork and the spring-members in each rear stay. The frame is in one piece, and contains the gasoline and oil tanks, tool-box and muffler. The saddle is mounted very low and has a spring post. Footboards are fitted and there are no pedals. The handlebars are cross-braced and the front fork operates on the same principle as the rear wheel suspension device. The change-gear lever is on the right and the clutch is operated by the foot-pedal on the footboard. The mudguards are of special shape and the brake is of the contracting band type. Handle starting for the motor is used. The compression relief device is operated by a rod on the left footboard. Contributed by H. D. Rhoads, Akron, Ohio.

A WORTHY IDEA.

MURRY FAHNESTOCK, of Allegheny, Pa., offers the following tip for manufacturers: "As there are many places on a motorcycle it is necessary to use left-hand threads to prevent parts from working loose it would be well to have such parts marked with an 'L,' or better still to have an arrow stamped on the part to show the direction in which the nut of bolt must be turned. This may seem like a small matter, but it gives much trouble to riders and even experienced repair men, especially where there are two lock rings, turning in opposite directions."

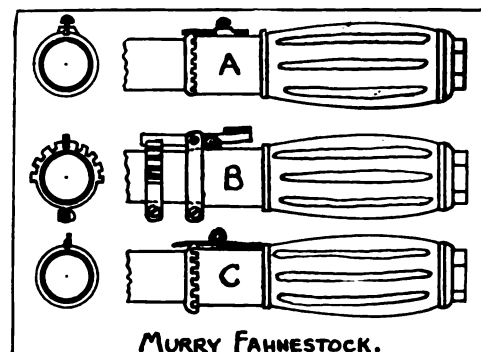
REAR WHEEL SUSPENSION.

TO a lug at the rear of the seat is fitted a coach-type spring, whose scroll end fits over a pin carried by the upper ends of vertical forks. To the axle is attached on each side the ends of horizontal fork members, which are pivoted to a special bracket near the base of the seat tube. The motion is

rocking around the latter bracket, while the vertical forks oscillate forward and backward, as the wheel rises and falls. Contributed by William Lindholm, Newark, N. J.

GRIP CONTROL LATCHES.

SOMETHING more definite than an uncertain amount of accidental friction to keep grip controls would seem desirable. The fatigue would be lessened by some form of latch, and three are suggested. A shows the first; there is a notched collar fitted to the handle bar and the grip sleeve carries a piano wire pointer in a lug. There is a set-screw for fastening the pointer in position. To change the position of the grip, the pointer can be lifted out of the notch or slid back, the grip turned and the pointer allowed to snap into the new notch. B has a radically-notched collar and a pedal-lever on the sleeve; the lever is held into the notch by a coil spring. To change position of the grip, the button on the end of lever is pressed, releasing the lever end from the notch. When the new position is reached the release of the button enables the spring to set the lever into the new notch. C is a modification of A, there being a coil in the wire pointer to give it springiness. It is

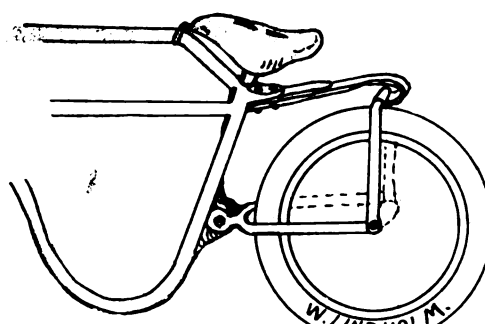


MURRY FAHNESTOCK.

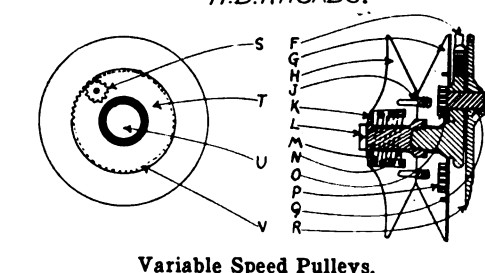
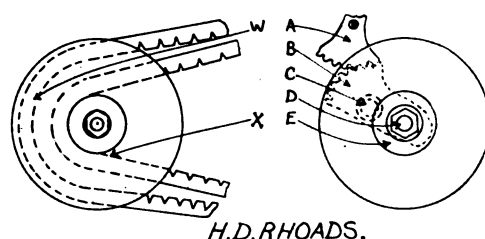
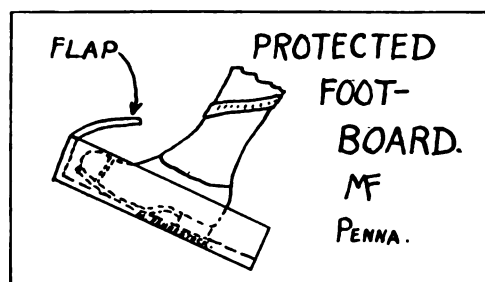
brazed to the sleeve at the grip end. Either A or C will serve as indicators in addition to acting as latches. Contributed by Murry Fahnestock, Allegheny, Pa.

PROTECTED FOOTBOARD.

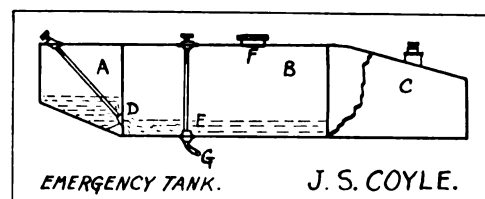
TO protect the feet of the rider an aluminum strip about three inches deep should be placed on the side of the foot rest as shown, with a curved dash or flap at the front. This would keep the shoe clean and also prevent the foot from bouncing off on negotiating bumps, etc. Contributed by Murry Fahnestock, Allegheny, Pa.



Rear Wheel Springs.



Variable Speed Pulleys.



EMERGENCY TANK.

TIPS AND TOPICS.

EVERYBODY has his troubles in this world, and the poor motorcycle dealer is not the least afflicted. When he isn't being bothered with unreasonable requests for free repairs, long after the guarantee period has expired, he has to explain that the effects of a bad case of "tinkeritis" nullify any guarantee whatsoever, and then soothe the lacerated feelings of the rider who has altered his machine for the worse. These are two of the reasons why gray hairs are so prevalent in the trade.

A dealer cannot please everybody, even with the variety of machines now on the market, and good evidences of this are the abnormal number of cases of "tinkeritis" and the letters that come to me about making various changes in existing machines, usually toward getting more speed. The "tinkers" go ahead with the work after hearing about some other fellow revamping his motor, or work along original lines and are generally dissatisfied with the result. The others, if they follow the advice given, attain the end desired (where that is possible), but at the cost of short life of the motor and increased expense. The advice of all technical men in both cases is: Make no structural changes in the machine. The manufacturers are wiser and more experienced, and usually do not put out a device that is unsatisfactory if treated properly. As to changes in the control systems, there is no harm done in making them unless they radically affect the operation of the motor, etc.

CARE OF BELT FASTENER.

BELT fasteners are inexpensive and comparatively easy of attachment under normal conditions, but even these advantages should not be looked upon by the careful motorcyclist as excuses for totally ignoring the uncomplaining little accessory. If the average fastener is not kept well oiled rust will set in quickly and necessitate an early replacement. Ordinary oil soon works off, however, and for that reason a lump of vaseline should be used. This will serve as a lubricant and also protect the fastener from rust. The rider who has been called upon to replace a fastener on the road, possibly in a downpour of rain, may realize that the connection has given way before its time, but even then the rust problem may not suggest itself to him. The use of vaseline on this fitting is one of the apparently unimportant little wrinkles that gives big returns.

PLAN BOWLING LEAGUE.

COLUMBUS, O., Sept. 24.—With the approach of cool weather, the members of the Columbus Motorcycle Club are getting ready for a busy season on the bowling alleys. The members will organize several teams representing their favorite machines, and a contest lasting through the winter months will be started for the championship of the club. Last year there were five teams in the race, the Indian team annexing first place, with the Harley-Davidson team a close second.

D. R. MACCOY, vice-president of the Joliet (Ill.) M. C., although nearly fourscore years of age, is an ardent motorcyclist and may be seen daily riding his machine.

AN EFFORT is being made by the Joliet (Ill.) M. C. to raise funds to properly mark roads within a radius of twenty miles of the city.

RESERVE GASOLINE TANK.

AN emergency gasoline tank is shown as a compartment in the regular tank construction. A partition divides the gasoline compartment into two, A being the emergency tank and B the regular tank. In A is fitted a needle valve and seat D, operated by a knurled handle on the stem. E is the regular needle (feed) valve and G the piping to the carburetor, while C is the oil tank. For ordinary running valve D is kept closed, and when tank B is drained, valve D is opened, when the contents of A run into B and pass to the carburetor. Contributed by J. S. Coyle, New Bedford, Mass.

SPECIAL MANUAL WANTED.

THE makers of a motorcycle should send out with each machine a manual in book form, explaining in the most simple manner the construction of the particular machine

which it accompanies. The manual should include adjustments, have illustrations, and particularly drawings and diagrams of the valves showing the setting. The carburetor should be more fully dealt with and instructions telling how to take down and reassemble the motor, how to clean it and finally how to test it out, should be included. Contributed by E. L. B., Blank, Pa.

A WOMAN SPEEDSTER.

MRS. HARRY SLAVINS, of Bay City, Mich., recently competed in motorcycle races at a fair. While she did not win a place in the finals, it is admitted that she showed class in piloting her Yale around the track.

In the British army motorcycles are now being used for scouting, in place of the cavalry.

QUESTIONS and ANSWERS

ANSWERS to Question No. 5, viz.—“Suggest means for improving the typical control system,” indicated strongly a desire for simplification of the operations performed by each hand, with the valve lifter separately operated, instead of being linked up to the spark control. One reply in particular was most ingenious, but the scheme is too intricate for the average rider, although considerable economy could be obtained if the arrangement was adopted. The first prize is awarded to Murry Fahnestock, of Allegheny, Pa., while the second award goes to B. A. Waltz, 1921 Ford Building, Detroit, Mich.

A number of answers to Question No. 6 have already been received. In general, the answers in this department have shown that riders are taking increasing interest in contests which involve thorough knowledge of the motorcycle and its parts. Answers to Question No. 6 will be printed in the October 17 issue.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the second issue following the number in which each question is asked. For example, answers to question Number 7, published in the present issue, will be printed in the October 31 issue. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time, the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of *MOTORCYCLE ILLUSTRATED* are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: “Editor Questions and Answers, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York.”

Question No. 6. What is the best way to remove and replace piston rings?

Question No. 7. Explain the operation of the inlet and exhaust valves.

FRANK

MERRITT

STANDARDIZATION OF CONTROL.

By Murry Fahnestock.

VIGOROUS efforts are being made by the Society of Automobile Engineers to standardize the control systems of automobiles, and it would seem a relatively easy matter to standardize the far simpler control of motorcycles. This would make it easier for the motorcyclist who has ridden one machine to become familiar with the handling of a new machine when he buys one. It would also tend to reduce accidents due to unfamiliarity in handling a strange system of control, for it requires time and much practice to become so familiar with a control system that the right thing is done instinctively and without hesitation. All control motions should be instinctive.

The second vital requisite is that the machine should be under complete control without removing the hands from the handlebars. Riders who have ridden over sandy or muddy roads will agree as to the importance to be attached to this feature, as it is no joke to have to take one hand from the bar to throw out the clutch when the machine begins to skid. Of course, all engineering is a compromise and absolute perfection an impossibility; so that it may be necessary to control the clutch by a lever at the left side of the gasoline tank, in order to secure the range and delicacy of control so essential to the proper operation of the clutch. The general adoption of this location shows that it has already been approved by the majority of

motorcycle manufacturers, so we shall take it as the starting point of our control system.

Safety a Prime Requisite.

The next point to be decided upon is whether the clutch lever shall be thrown forward or back to engage the clutch. It is important to remember that on such a high-speed vehicle as the motorcycle provision for quick and sure stopping is of the utmost importance if safety is to be considered. It is also one of the first points that is observed by the prospective purchaser. To stop quickly it is necessary to throw out the clutch, and since it is an instinctive motion to pull back the clutch lever when a collision is imminent, then pulling back the lever should disengage the clutch. An example of this practice is found in the fact that all automobiles have the emergency brake so arranged that pulling the lever backward stops the car.

Having placed the clutch lever at the left of the gasoline tank, the logical location for the throttle control is the right-hand grip, so that the throttle may be opened as the clutch is engaged, thus making possible a smooth quick get-away, without racing or stalling the motor. The importance of this is best recognized when going slowly through city traffic where it is necessary to throw the clutch out frequently and the noise of a racing motor is objectionable.

Spark in Left Grip.

If an emergency lever is thought desirable

it should be placed under the right-hand grip, so that the right hand can apply the brake while the left hand releases the clutch, when a sudden stop is imperative. The left-hand grip is the logical place for the spark control, since the general adoption of the magneto has made it practically unnecessary to manipulate the spark under ordinary conditions of riding. This is because the greater intensity of the spark at high speeds from the magneto, ignites the charge more quickly and thus less spark advance is required.

If the compression release is incorporated with the spark control, it makes the control simpler, which is a great advantage for the inexperienced rider; but if a separate release is thought desirable, and no emergency brake is fitted, then the place for the compression release is under the right-hand grip, for it will often be used as a brake. If an emergency brake is fitted, the compression release will necessarily be placed under the left-hand grip. If a magneto cut-out is furnished, it should be placed adjacent to the right-hand grip, for it is only used when stopping the motor or using the engine as a brake in descending long, steep hills, for example.

Control Elements.

One way of fitting the emergency brake is to attach it to the clutch-lever in such a way that after releasing the clutch, the continued movement of the lever applies the brake. Of course, the throttle could also be interconnected in such a manner that throwing out the clutch would slow down the engine and

thus prevent racing of the motor; but this would make it difficult to start the machine from a standstill in heavy sand or mud as it would be impossible to speed up the engine before throwing in the clutch, unless some special means were provided for temporarily throwing the connecting device out of action.

One feature of the average control that is generally unsatisfactory is play or lost motion, due to wear in the joints of the control system. The fewer the joints, the less play there will be, and in this respect the Bowden wire control would seem to have an advantage over the universal joint and sliding sleeve system. This looseness becomes increasingly evident after the machine has been in use for some time, and sometimes manifests itself in erratic running of the motor. At any rate, it makes the control uncertain, particularly at low speeds, and often results in stalling the motor when one merely wishes to slow down in traffic.

Applying the Remedy.

The best thing to do is to tighten up all joints, inserting new washers and bushings where necessary; but it is often possible to attach a light coil spring to the throttle lever of the carbureter in such a manner that the spring has a constant tendency to pull the lever either open or closed. Thus the spring will take up all the looseness in one direction, and one may operate the grip control feeling assured that the carbureter will respond accurately and not plus or minus an uncertain amount of play. The spring should not be strong or stiff, or the throttle will not remain in the position in which it is set.

SECOND PRIZE WINNER.

FROM B. A. Waltz, of Detroit, Mich., comes the following answer. It is excellent, except, perhaps, the linking up of the spark and gas could not be trusted to most riders since an independent adjustment also is mentioned. It is given second prize for its general excellence.

"1. A magneto cut-out consisting of a spring mounted on the binding post usually provided with magnetos for grounding the primary circuit, said spring to be in contact with the frame of the machine when the magneto is giving the greatest retard of spark.

"2. Connection of usual spark control to the throttle control in such a way that for openings of the throttle for speeds up to 20 miles per hour there will be a corresponding spark, varying between retarded and advanced position. Provided, however, that there may be means for retarding spark if desired with any other opening of throttle, greater than that necessary for speed mentioned.

"3. Provision of a graduated control for the clutch by lever on handles, as an improvement upon the present crude grip control or tank lever, which demands loss of hold on grips at times when a firm hold is necessary.

"4. Provision for an auxiliary handle bar control of the brake, for use in emergency when feet are not upon pedals.

"5. Provision of a reducing motion in the throttle control mechanism to allow more delicate adjustment of the throttle.

To Malcolm Bedell, of 26 James street, Montclair, N. J., is awarded honorable mention. The accelerator device mentioned is novel, but might not appeal to the majority of riders. His answer follows:

"The typical motorcycle control is by the double grip system, one grip controlling the

gas or throttle and the other the spark and valve lifter. If the spark is operated by a small lever directly over the grip that works the valve lifter, it can be set in starting at the position where it offers the least resistance. The lifter can then be operated without disturbing the spark setting. A clutch lever under one grip and a spark lever under the other will also add greatly to the comfort of the rider. An accelerator under one grip to open the throttle and operated by pulling back with the first finger may also appeal to some users."

Harry L. Dearborn, of Hillsboro, N. H., is also awarded honorable mention. He writes as follows:

"Fit the throttle grips and exhaust valve lift on the right bar with the spark advance and free engine clutch on the left; this will enable the spark to be set and the engine accelerated quickly with the least movement of the hands when starting off, for example. It will enable a stop to be made with spark and throttle set ready in traffic. Most riders can steer better with the right hand than with the left."

ROLLO CYCLECAR.

WALTER DOYLE—The Rollo cycle car is made by the Rollo Car Co., Ltd., Conybere street, Birmingham, England. Its price in England is from \$484.50 to \$510, according to the fittings (wind shield, top, etc.). There are no American agents, so write to the above address.

FIRING SEQUENCE.

A. DELARONDE.—Firing sequences on twin motors are figured from the rear cylinder as No. 1, and are given in terms of degrees on the crank path, although the carbon brushes on the magneto are set 180 degrees apart. The majority of twins have the cylinder axes set at 45 degrees apart and the firing sequence is 0-405-315. The last figure is the angular distance in degrees between No. 2 cylinder and No. 1. It will be noticed that the sum of the angles is equal to 720 degrees, or two revolutions. The Indian has cylinders set at 42 degrees, and the sequence is 0-402-318. The English-built Premier has the cylinders set at 45 degrees, but owing to an eccentric connecting-rod arrangement, the firing sequence is the same as the 90-degrees twin, given below.

The Thor has the cylinders at 50 degrees, with the sequence 0-410-310, while the M.M. twin-cylinders are 90 degrees apart and fire at 0-450-270. The relative balances of the various angles is treated in an article on "Balancing the Motorcycle Motor," March to May, 1911, of this publication.

BRIDGEPORT BOATS.

L. HERING.—The boats between Bridgeport and Port Jefferson, L. I., run at 9 a. m. and 6 p. m., on week days only during October. There are no boats running on Sundays.

N. S. U. TWO-SPEED.

H. F. LEE.—Apply to the Sun Motor and Supply Co., 307 Amsterdam avenue, New York, for details of the N. S. U. two-speed gear. They are the American agents for all N. S. U. material.

CLARENCE WEBB, of the Roanoke (Va.) Cycle Company and Joseph Kizer recently made a trip on their motorcycles to Washington and Baltimore.

PORTS IN CYLINDERS.

ALF. FREIDLEIN.—Form the ports beginning at $\frac{3}{8}$ of an inch before the piston reaches the downward dead center and shape them so that they will be all uncovered when the dead center is reached. Use a port area equal to the area of the exhaust valve. Use a $\frac{3}{8}$ drill and have the ports about $\frac{1}{2}$ to $\frac{3}{4}$ of an inch apart. We cannot give you the exact dimensions, as you do not tell us the size nor make of the cylinder you purpose porting. As to the advantage of porting a so-called "eight-valve" motor, it is very slight, and should not be necessary if the valve areas are properly calculated.

For timing the valves of a racing motor, apply to the makers of the motor. Generally speaking, the exhaust valves open earlier than on a stock motor. On a ported motor, start the exhaust to open as the piston uncovers the ports. We cannot give you further details until we know to what motor you refer.

Shrinkages are calculated for in the wood patterns, so that the casting would be the proper size with the proper shrinkage allowance. We advise your consulting a foundryman, or text-books on founding and pattern-making.

As the Brighton Beach and Vailsburg motor-dromes hold meets under F. A. M. sanction, no motors over 61 cubic inches capacity are allowed to compete. There are no restrictions as to air-valves, etc.

SIDECAR INFORMATION.

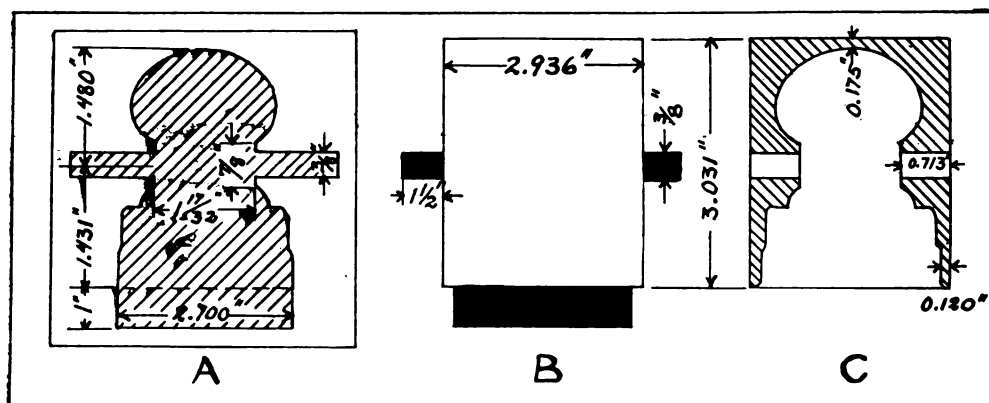
J. E. DONALDSON.—(1) A sidecar will operate well on poor roads if care is taken in the steering and if speed is not attempted. On hills, if the power is sufficient and the gearing the proper one, there should be no difficulty in making ascents. That is, unless they are unusually steep, in which case the passenger will have to walk. The passenger on a sidecar acts as ballast as well as passenger and should assist the outfit if necessary.

(2) Six horsepower, or still better, seven is sufficient for general sidecar work over other than smooth going.

(3) The latter form of drive is preferable, but the majority of European sidecar machines use the V-belt. It is really a question of what you can get out of the motor. We have ridden a six motor with sidecar in hilly country and never had trouble with the V-belt fitted.

TO CAPE COD AND THE COAST.

HARRY DETTER.—From Northbridge go to Farnumville, then to Saundersville, Millbury and Worcester; then go to Shrewsbury, Northboro, Marlboro, South Sudbury, Wayland, Weston, Waltham, and Cambridge to Boston. This route is the reverse of our route number 10 (Spring Touring Number). From Boston take our route number 9 to Provincetown, via: Milton Lower Mills, Quincy, Hingham, Cohasset, Marshfield, Plymouth, Sagamore, Sandwich, West Barnstable, Barnstable, Cummaquid, Yarmouthport, Yarmouth, Dennis, Brewster, Orleans, Eastham, North Eastham, South Wellfleet, the Truros, and Provincetown. Cape Cod is readily reached from the latter town. To get to Martha's Vineyard, turn off at West Barnstable and go to Marston's Mills, Mashpee, East Falmouth, Falmouth, and Woods Hole. From the Hole get boat (New Bedford to Oak Bluffs) to Oak Bluffs. Return via New Bedford, and ride through Westport Factory, Fall



River, Warren, Barrington Station, East Providence and Providence. At the latter city, go north to Pawtucket, then to Ashton, Woonsocket, Blackstone (Mass.), Uxbridge and Whitins to Northbridge.

STORAGE BATTERIES.

H. C. GREENWOOD.—Write the Electro-lamp Battery and Ignition Company, 67 Atwater street, Detroit, Mich. We do not think that any firm has a special make for any particular motorcycle. Small storage batteries are perfectly practicable for ordinary use; for years this type of ignition source was the only one employed on European motorcycles.

FITTING A CLUTCH.

JACOB P. DALL.—An Eclipse clutch can be fitted to the 1910 model machine you mention, and so can an Indian clutch. Write the makers or communicate with the nearest agent for the respective products, specifying the model and serial number of the machine.

DE LUXE MOTORCYCLE.

A. J. W.—The maker of the De Luxe motorcycle is the Excelsior Cycle Co., 166-8 Sangamon street, Chicago, Ill. The motors are made by the F. W. Spacke Machine Co., Indianapolis, Ind.

WATCH THE FILLER CAPS.

WHILE little trouble is experienced on American machines with leaky or unstable filler caps, too much importance cannot be attached to the proper fitting of these seemingly negligible parts. Many riders—not all of them in the novice class, by any means—are prone to give the cap a careless twist or two after replenishing the gasoline supply and thus leave an opportunity for the fuel to slop out, flow over the tank and drip down on the motor. With the machine in this condition a single backfire in the carburetor may start a costly blaze. The time devoted to screwing the filler cap in carefully and snugly is always well spent.

The same rider who handles his filler cap carelessly is likely to disregard a small leak in one of the seams of his tank, and thus seek trouble again in the form of a fire. With the gasoline sloshing about in the tank it does not require much of a leak to ooze out considerable fuel, and a comparatively small quantity may cause trouble. Some machines have a habit of developing a small leak where the tank is strapped to the bottom bar, but once this is repaired it is not likely to cause further annoyance. At any rate the original outlay for a repair is insignificant compared with the expense incident to even a small blaze.

PISTON PATTERN.

J. W. BRAUER.—From your sketch we conclude that you want the piston for a 2 15/16-inch cylinder, as it would be too small for a 3-inch one. The pattern for the piston is shown at B (see illustration); it is 3.031 inches long and cylindrical, with a diameter of 2.936 inches. The dimensions allow for shrinkage. The core prints, shown in black, are cylindrical also; the side prints are 1 1/2 by 3/8 inches, while the base print is 1 inch deep by 2.700 inches in diameter. The core will look like the shaded part of A the dimensions being given. The outline represents the core box, and there should be two of these with the edges registering so that the core will

serve to make the desired hollow inside the piston. It may be necessary to reinforce the side arms of the core with wires to prevent their breaking away.

The pattern B is cut in half. Make up the drag and use one of the B pattern halves, and then do the same with the cope, using the other half. Build up the cores in the boxes and bake them. When ready remove the B patterns from the drag and cope. Place the baked core so that the side arms fit into the spaces left by the side core prints of B and that the base section (below the dotted line in B) fits into the base print space. Brace by a light iron rod if necessary. Put drag and cope together and the mould is ready. For directions as to pouring hole vents, see some treatise on casting or some foundryman. When the piston is cool, its cross-section will be that shown at C. After scraping off the sand inside and out the piston will be ready for machining to the required form. Note that there are holes for the wrist-pin cored out, for making the machining easier. We have left the interior form of the piston to you to decide on, other than that given.

PROF. ROBERT GOODRICH, of the University of Arizona recently completed a motorcycle trip through the southern part of his state. He covered a distance of 500 miles and took 18 dozen pictures while en route. He rode a twin Indian and experienced no trouble on widely varying roads.

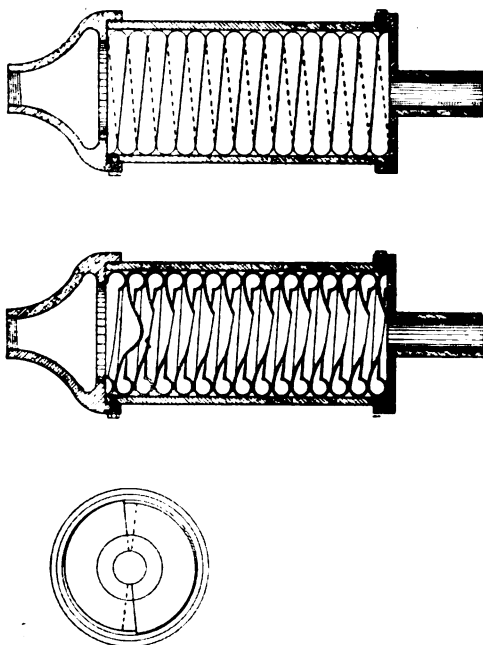
NEW MUFFLER BUILT ON NOVEL LINES

Invention of Texan Embodies Principle of the Maxim Firearm Silencer and is Credited With Unusual Efficiency.

SILENCE and a minimum of back pressure are the prime qualifications of a muffler for motorcycle use, and that this is realized by inventors and designers is readily perceived by a glance over the patent reports and the columns of the trade journals. Some ideas stand out from the general run of designs, and one of these is here illustrated. It is embodied in an invention patented by L. C. Smoot, of Hillsboro, Texas. To those familiar with progress in firearms manufacture, the similarity to the well-known Maxim silencer will be at once apparent, but certain details of construction have been made the subject of a patent.

The muffler consists of a series of spirals of pressed steel, placed in a cylinder body so that the cylindrical portions communicate with each other. These spirals are made with a hump in the center, but this is cut away in all but the next to last. The cutting away of these humps forms a channel practically the length of the chamber, but the sharp edges around the cuts allow a portion of the exhaust gases to pass successively into the cylindrical portions just mentioned and thus make their exit through the last spiral. The muffler is fastened to the exhaust pipe by the straight tube shown, while the outlet is through the curved casting at the opposite end. The action is as follows:

The exhaust passing into the muffler through the large openings in the spirals has portions deflected by striking the sharp edges and the gases thus separated from the main stream are given a rotative motion and pass out thus through the outlet. The main stream strikes the hump of the uncut spiral section and is

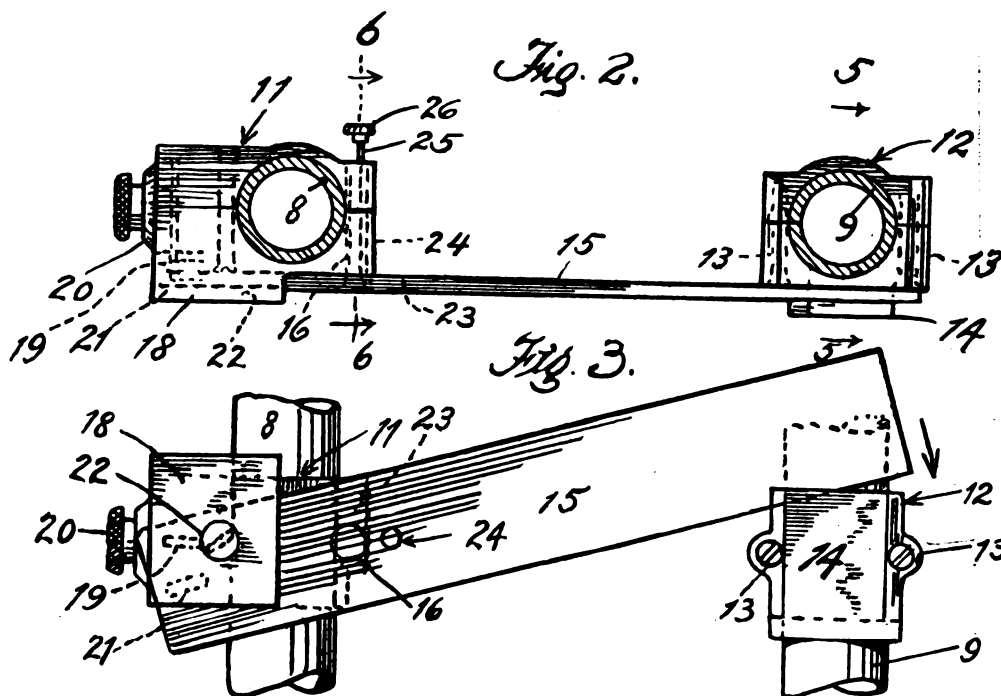


deflected into that spiral and joins the whirling stream, making its exit along with the latter. Its superior velocity draws the whirling stream along faster. The shape of the hump is such that back pressure is reduced to the minimum as the stream is deflected on striking it. The breaking up of the stream successively reduces the noise of the exhaust, and thus the prime requisites of the muffler are fulfilled.

A MOTORCYCLE LOCK.

IN the accompanying illustration is shown a new motorcycle lock, for which the California Motorcycle Company, of 818 South Main street, Los Angeles, is about to take out a patent. The principal claim for this lock over other similar devices is that it is a permanent attachment. It is fastened by means of a clamp on either the front or rear fork of a motorcycle. The cross-arm 15 is hung on a swivel so that it may be swung down between the spokes of the wheel, engaging in the clamp 14 on the opposite side of the fork. The combination lock shown at 20 locks the cross-arm in position and when the arm is down all the screws on the clamp are covered. When the cross bar is swung out of engagement it stands up parallel to the fork and is locked in position by a spring, 26. This makes it impossible for the arm to spring back between the spokes while the machine is in motion. The lock will be manufactured in two styles, one having a small padlock and key and the other the combination lock.

JOHN JAMIE and Louis Bornegrebe, of Aurora, Ill., covered 400 miles on a recent run to Danville.



ONTARIO RIDER ON SKIDDING THEORIES

Cobalt Enthusiast Supports C. A. Shaw in Belief That Front Wheel Slips Cause Motorcyclists Most Trouble on Greasy Roads.

FROM Cobalt, Ontario, comes the following letter in support of the anti-skidding theories advanced recently by C. A. Shaw, of Groton, Mass. It is written by O. L. Holmes, who has had considerable experience as a motorcyclist and whose opinions are therefore interesting. Mr. Holmes writes as follows:

"Murry Fahnestock's letter to MOTORCYCLE ILLUSTRATED, attacking the theories of Mr. Shaw with reference to skidding, prompts me to offer a few arguments supporting the claims of the latter. I admit the soundness of all Mr. Fahnestock has to say concerning rear-wheel skidding, but his statement that automobiles are never equipped with front-wheel chains is wrong, because the four-wheelers are often so fitted for service on muddy roads, particularly in clay districts. The chains are fitted on rear wheels principally to give traction for forward movement. If there are no chains on the rear wheels they will spin in soft going and by lifting up the rear of the car cause a skid. The power plant weight being over the front wheels helps to hold them to the road, and for this reason chains are not needed as badly here as in the rear. Any automobile driver who has driven over a narrow, steeply-crowned clay road in wet weather knows that chains or non-skid devices do not eliminate side-slip or skidding. So much for the automobile side of the question.

"As regards the motorcycle tandem, no two riders on earth have such sympathetic harmony of movement as to take the same action at the same instant by way of preventing a skid. One or the other will overdo the balancing act. Naturally, no tandem seat places the weight between the wheels and the tendency is to lighten the grip of the front wheel on the road and place most of the responsibility upon the rear wheel, which, because of the added weight, is not so likely to skid.

"In other words, I believe that when front-wheel skids are guarded against the machine

can be driven over almost any kind of a road with safety. I have found that in cutting corners on a half-mile dirt track with a smooth rear tire and a Nobby tire on the front wheel I can get greater speed by five miles than when the tires are reversed and the smooth one is on the front wheel. This ought to prove something.

"As to the relative value of singles and twins for slippery going I would say that the former have a considerable lead. If the single is not overgeared it will often make headway in greasy clay where a twin would get into serious trouble and flounder all over the road. Recent endurance performances in this country and also in the British Isles bear out my claims. In summing up I would say that the distribution of weight on the machine, the fork design, center of gravity and alignment of the wheels have much to do with skidding and that the saddle position and shape of the handlebars also figure."

SHAW STANDS HIS GROUND.

C. A. SHAW, of Groton, Mass., whose skidding theories were discussed in a recent article in MOTORCYCLE ILLUSTRATED by Murry Fahnestock, of Allegheny, Pa., submits the following brief statement with reference to his arguments:

"I was much interested in Mr. Fahnestock's article on skidding which appeared in the columns of MOTORCYCLE ILLUSTRATED. His reasoning is ingenious, but whether I can disprove his theories or not does not bother me. Why? Because the proof of the pudding is in the eating. My riding in the last three months has been restricted to the demands of business; still I have covered well over 2,000 miles, 600 of which were on the narrow clay roads of Maine. Beyond one skid of my rear wheel in a clayey mire, which did not result in a spill, I had absolutely no skidding and not a single fall. What's more, I did a lot of riding over wet roads.

"My rear tire, having covered 3,000 miles, is quite smooth, but the knobs on my front tire show very little wear and it still grips the road wonderfully. If Mr. Fahnestock or any other reader wishes to test the value of my idea it is easily done. Select some day when the roads are greasy after a rain. Ride five miles with a smooth front tire, and then place an anti-skid tire on the front wheel or some anti-skid bands on this tire and cover another five miles. If you find no improvement in traveling with the front tire thus safeguarded against skidding, then there is nothing in my idea. But I know you will note a difference."

MORE ABOUT SKIDDING.

FROM a road veteran: "Perhaps some riders skid on front wheels and others have the rear wheel habit. My few skids have been of the rear wheel variety, and I have noticed several times that when the front wheel starts on a skid and the rear wheel refuses to follow suit, the machine—mine, anyhow—always straightens up and goes on about its business. From my limited skidding experiences—I am usually a very careful rider—I have found that a rear wheel skid means a stop for a few minutes to straighten a bent crank or something; a front wheel skid means an anxious one hundredth of a second; after all, if the machine gets a proper start on a skid there is no time to figure out the theories and angles. In an instant the machine is on its side and the only thing the rider can do is shut off the power if the motor is still running; then stand the mount up, straighten the handlebars, take that dent out of the horn, see what caused the skid if possible and profit by the experience."

"RED INDIAN."

SKIPPED BAD ROADS.

EDWARD WHEELER, of Paducah, Ky., journeyed to Louisville by train recently and from there he rode to Buffalo, N. Y., on his motorcycle. He explains that he could not ride his machine to Louisville on account of the bad condition of the Kentucky roads.

PAUL VOGEL and Maurice Wilson of Omaha, Neb., are en route on a tandem motorcycle jaunt to New York.



NOT long ago the writer, while working himself into the good graces of a new machine, climbed a certain hill on an uncertain road in northern New Jersey and upon taking a sharp turn almost bowled over a brother of the trail who was standing beside his mount. We stopped, and as the distress signals were quite evident inquiries were in order. The story was soon told.

The offending machine, almost brand new, should have taken the hill without a whimper, but it had failed to top the grade in two attempts. The owner was not only tired; he was disgusted. Being the type of roadster who swears by his mount, he was irked at finding it not up to his calculations. Then came a council of war. It developed that the rider had started to climb the hill under a fairly good head of gas and that upon the first hint of a "knock" he had considerably retarded his spark. The writer suggested that this might have been overdone, and another trial of the new machine proved that injudicious handling of the spark accounted for most of the trouble. The owner went his way with renewed faith in his mount.

It is not possible to lay down a hard and fast set of rules for hill-climbing, applicable to every machine, but it is well to remember that in starting to climb a grade, unless it is a short one which can be rushed, the engine should be given the minimum of gas and the spark kept advanced for a time. Assuming that the carbureter is properly adjusted, the air supply should not require alteration unless the rider has purposely been running on a weak mixture. When the motor feels the load it is time to increase the gas supply gradually and to keep a sharp ear open for the "knock" which indicates that the spark must be retarded slightly. Many riders fail to get the most out of their machines in hill-climbing because the motor is not given its additional gas at the instant that it is most needed, and because the spark is too far retarded at a critical time. Any shock, however slight, to the momentum of a machine on a hill is bound to prove costly.

A Handy Sidecar Wrinkle.

USERS of sidecars who employ a loose cushioned seat in their passenger attachments are often troubled by having the cushion work out of its position over bumpy roads and slide down to the foot of the "basket," when the latter is being driven empty, but a simple contrivance recently noted will obviate this irksome habit. An ordinary strap and buckle is riveted to the sidecar seat and when the cushion is placed in position the strap is fastened—a matter of a moment—and the cushion will not be dislodged over the roughest roads. When spares are carried under the seat of the sidecar it is doubly annoying to have the cushion bumped

out of place, as the spares are quite likely to follow and give the rider an unpleasant time collecting them. Even when the "basket" carries a passenger the buckle and strap render service by keeping the upholstered seat just where it belongs in rough going.

Speed at Expense of Strength.

I DON'T think the desire for abnormal speed is very common, but almost every rider wants to be able to hit up a good clip in a roadside brush and come off first. To get a little extra speed, a rider can use cams of different profile from the ones ordinarily fitted, lighten the pistons and connecting rods, and cut ports in the cylinders, but he does this at the expense of the life of the motor, and the failure generally comes surprisingly quick. But these matters require considerable calculation and knowledge of a high technical character, and a greenhorn rider attempting them would simply spoil the outfit completely. Only the other day such a case came up, and the experimenter will be obliged to buy practically a new motor.

He was a pretty weighty rider, and was tired of being passed on the road by machines of the same power, so he obtained exhaust cams from another very fast machine of a different make, fitted them and cut ports as were in the motor from which he got the cams. It took about eight hours of hard work to get a satisfactory running of the bus, but it certainly did move; wouldn't go less than twenty miles an hour with the spark fully advanced. On most of the brushes along the road he "cleaned up," but was finally defeated in a match on one of the dirt tracks with a member of his club. During the race his motor quit entirely, and on taking it down this is what we saw: Long vertical scores in the cylinders, due to sand entering the ports; a broken piston and cylinder-head, with one of the exhaust valves embedded in it, and the crankshaft bearings gone. The cams were so sharp that the exhaust valve had its head literally hammered off and the nickel steel head punched through the piston and stuck inside the head finally. The sand entering the ports "fixed up" the bearings. You can imagine the repair bill he faced. As the machine had not been in use more than three weeks, he demanded repairs under the guarantee, but didn't get them. Now he is a bitter enemy of the maker and dealer, simply because he had a bad case of the tinkering disease and couldn't get the dealer to pay for his experiments. Moral: Don't tamper with the machine unnecessarily.

If, gentle reader, you are such a rider as L— you are not the dealer's best customer, nor his worst. L— buys a new machine each season, takes it apart, verifies every fitting, lightens very slightly each piston, assembles it and retimes the motor. If the

present model of carbureter does not give as good economy as that of last year, the latter goes on the machine. The result is that after going through this operation, L— has a very economical bus, one that is speedy and a strong hill-climber. His second-hand mounts sell for the highest prices in the neighborhood. But riders of this type are all too rare nowadays.

Flabby Mixtures.

ANOTHER "tinkeritis" case was also costly, but in a slightly different direction. This party, whose trouble could have been remedied by a change of one tooth in the valve-gearing, concluded that he was not getting enough gasoline, and proceeded to enlarge the jet aperture. He did not get enough air, so fitted a little Tucker grease cup in his manifold, and lo! the mixture was good and the motor ran quite well. But after going eighty miles the tank was nearly bone dry; he retimed the valves and did about ten miles per tank better than before. This summer the trouble began, as he went to a hilly district for the holidays and had to run slowly a good part of the time. The net results were a big fuel and oil bill and a motor whose cylinders were furred with carbon. He was running on a "flabby" mixture; one that had the proper proportions of gasoline and air at high speeds, but in which there was too much gasoline for the power developed. A part of the gasoline was merely burned without doing work, and was thrown out of the muffler uselessly. The jet aperture was too large. On low speeds too much fuel was used also, otherwise the mixture would have been too lean to give power with the enlarged jet opening. More riders run on flabby mixtures than one would think, and there are several ways of finding out whether the mixture is flabby or not. One is to ride on a given amount of gasoline and note the mileage, doing this a number of times and noting at what setting of the needle-valve the motor pulls strongly and how the most mileage is obtained.

Who Wants This Change-Speeder?

IN these days when every thoughtful motorcyclist is giving careful consideration to variable gear developments it is interesting to note the ingenious but sometimes far-fetched designs by which foreign manufacturers strive to obtain the desired results. In this connection it is probable that a certain French builder has something of a lead on all competitors. He is marketing a two-speed gear which, in order to run on low, requires that the rider pedal backwards!

The device is made up as follows: There are two chain rings placed side by side, one larger than the other, according to the ratio of gears required. Then on a bracket depending from the chain stay there is a small

chain wheel in the form of a jockey. The chain leaves the sprocket, goes round the smaller chain ring, round the jockey wheel, over the larger chain ring—from bottom to top—and leaving it at the top takes a downward course (inside the stay) to the bottom of the sprocket. The result obtained by this complicated arrangement is that the rider gets the direct normal drive when he pedals in the ordinary way. The pull from the top of the sprocket rotates the smaller chain ring and the rest of the chain's journey is merely by way of returning.

When he desires to use the low gear the rider pedals *backward* and the pull then comes from the bottom of the sprocket and so rotates the larger chain ring. In this way it obtains an increase of power, but a smaller number of revolutions for each turn of the cranks. As far as the mechanical operation of the device is concerned it has given the result intended, but that any American motorcyclist could put up with a contrivance which required his back-pedaling to obtain a low gear is hardly within the bounds of imagination. The Parisian inventor's gear, by the way, has been shown at several French motor shows, but it is not reported that it has worked up any interest worthy the name.

The Combination Drive.

SINCE a Triumph machine, using the combined chain and belt drive, romped off with the Junior Tourist Trophy on the Isle of Man a short time ago American designers as well as those in the front rank of English manufacturers have been giving this transmission system its full share of consideration. That the combined drive has its marked advantages cannot be denied. It gives a short, high-speed chain drive to a countershaft, thus enabling the user to employ a larger "small" pulley for the belt drive. The belt drive as a result becomes more durable and there is less likelihood of belt slip. British riders of the combined drive machines assert that they make good on all the claims advanced for them.

In use the combined drive adds one hundred per cent to the life of the belt, according to authoritative reports. The chain is given the first and most severe part of the driving stresses to transmit, while the belt escapes with comparatively light strains. Even under these conditions the much-abused chain outwears the belt and gives less trouble. This brings into court once more the old case—chain vs. belt—which it is not the purpose of these paragraphs to dispose of. However, the combined drive is rapidly making friends among the Britishers, and that it is worthy of all the attention it has attracted appears to be borne out by the tests.

Progress in Army Tests.

OF late I have noticed frequent references in the English motorcycle press to the important part being played by the motor two-wheeler in manoeuvres of the British army, and it is evident that American advocates of the motorcycle as a military adjunct may pick up many a tip from the warriors of Cousin Jonathan. The situation takes pertinence from the fact that motorcycles were used to excellent effect during the recent "siege" of New York, when the Red and Blue armies carried out their remarkable campaign to a draw. One of the generals engaged in the conflict stated, unhesitatingly, that he would have been sorely hampered without his mo-

torcycle scouts and messengers; that they had, in fact, permitted him to turn the tide at more than one point. As the campaign was naturally one of the keenest strategy, the motorcycle, skimming hither and thither at top speed and with minimum fuss and flurry, occupied a place of prime importance.

About 250 motorcyclists figured in the British army manoeuvres held during the present month. This staff was made up as follows: Twenty riders furnished by the A. C. U., the governing motorcycle body; 60 riders from the Automobile Association and Motorcycle Union; 40 from the Legion of Cyclists; 70 from the Territorial Cyclist Battalions; 20 furnished by the regular army; 15 from the Officers' Training Corps, and 30 from the special reserves and the Royal Engineers. In addition any motorcyclist who wished to participate could, by registering with the Legion of Cyclists, place himself in a position to be called upon for service.

The War Office allowed each motorcyclist a free railway pass for himself and his machine from his home to Cambridge and return. In addition an allowance of eight shillings a day was made to cover wear and tear on the motorcycle, charges for gasoline and oil and insurance. This was paid only when the riders were in service, and not during train journeys, etc. There was free mess for the motorcyclists while in camp and an allowance of eight shillings a day for hotel expenses while they were in service on the road.

KEROSENE AS FUEL.

GASOLINE prices have been noticeably fluctuating during the summer and early fall, and the tendency is generally toward a higher figure. Our British brethren are feeling this more than we as yet, the prices (which include a tax) being in the neighborhood of 40 cents per Imperial gallon, or at the rate of 32 cents per United States gallon, with prospects of a further increase in the near future. That any radical increase in price is not to be our portion we devoutly hope, but in the event of such being the case, it would be well to consider some other form of fuel, or a combination of gasoline and another fuel.

Of the fuels obtainable on a scale sufficient to satisfy the needs of the thousands of users of internal combustion motors, there are but two: kerosene and alcohol. The latter, in the form of denatured spirit, is very expensive,

costing in the neighborhood of 33 cents per gallon in barrel lots, and also would require, for the best economy, that the compression pressures be raised to as much as 100 or 120 pounds per square inch. This would involve an extensive redesigning of motors. Kerosene, on the other hand, is obtainable in gallon quantities at a very moderate price and can be used in motors constructed for gasoline fuel, without any redesigning of importance, if any at all. Difficulties lie in the proper vaporization of such a fuel, preheating being necessary for the purpose, or the mixture with air will be too rich and a wasteful odorous exhaust will be the result. A combination of gasoline and kerosene would seem to be the best under the circumstances, and it is toward the employment of this double-fuel that experiments have been conducted abroad.

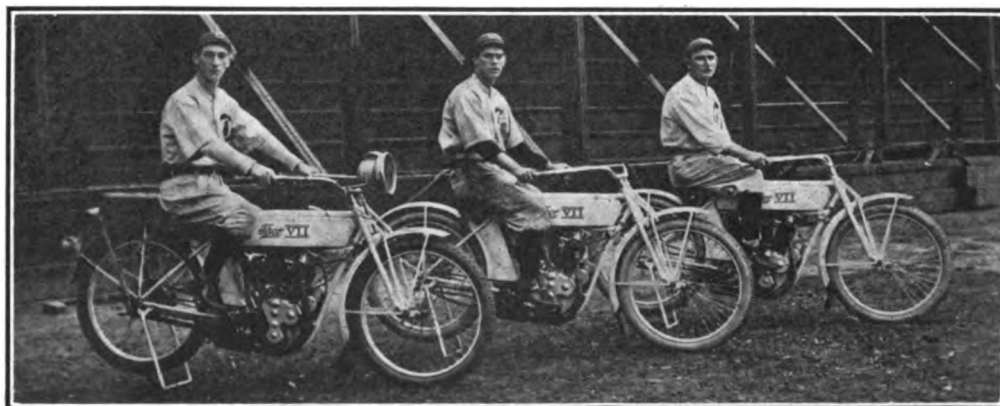
One of the pioneers in this line of experiment is C. Binks, of Manchester, England, who has brought out a two-jet, two float-chamber carbureter for motorcycle service. One jet, the smaller, communicates with the gasoline compartment of the tank, and the other to a second compartment containing kerosene. On slightly opening the throttle, the gasoline jet is uncovered and this fuel is used for starting and slow running. As the throttle is further opened, the suction on the gasoline jet is decreased and the kerosene jet exposed, until the motor is running on a combination of kerosene and gasoline. This action precludes the necessity for preheating, as would be the case with kerosene only being used. The proportions of the tanks are 75 per cent. gasoline to 25 per cent. kerosene. Experiments along this or allied lines would be of inestimable value toward the attainment of economy in motorcycle operation.

MOTORCYCLIST BRINGS SUIT.

COLUMBUS, O., Sept. 23.—Daniel G. Vandermarck, of Groveport, O., has filed suit for \$469.50 damages against Charles Miller, of Canal Winchester. Vandermarck says his motorcycle skidded on a road south of the city and that Miller, who was driving an automobile, ran him down, smashing his machine and injuring him.

MUST HAVE LICENSE.

A LAW requiring all motorcyclists to carry a State license number went into effect September 9 in Kansas City, Mo., and State License Inspector Roach announces it will be rigidly enforced.



THREE CUBS IN THE RANKS.

THAT a baseball player may also be a full-fledged motorcycle enthusiast is evident from the accompanying photograph which shows Ritchie and Lavender, pitchers, and

Needham, catcher, all of the Chicago National League Club. The picture was taken at the Chicago grounds when the players consented to mount their machines in uniform for the benefit of the photographer.

The SUCCESSFUL DELIVERY VAN

ITS CONSTRUCTION AND OPERATION

D. R. HOBART

*Organizing a company—
Analysis of failures in the past—The problem from a territorial standpoint—
Different types of vehicles.*

ONE of the problems of the small retail merchant in a large city is to find the best method, from the viewpoints of economy and reliability, of delivering his packages. He has customers from all parts of the city, as a rule, although his main trade is in his immediate neighborhood. But if he specializes and has no branch stores, he is usually compelled to hire a boy and pay his carfare if the delivery is to be made quickly, or throw himself on the mercies of a local expressman, who charges in such cases all that the traffic will bear. Besides he is uncertain as to time of delivery.

Merchants who have tried boy-delivery know its unreliability and too-great expense, and in some cases they have adopted the carrier-bicycle. In using such a vehicle practically only time is saved; there is the purchase price, interest on investment, tires, etc., to be considered, and it is doubtful in the end if the gain is sufficient to warrant the increased expenditure. The bulk of goods a boy can carry in his hands and that capable of being carried on the bicycle is practically the same, so that given a certain number of packages per day, the cycle-mounted boy will deliver more than he who travels by street car.

This leaves the man who has goods to deliver with two alternatives, district messenger service or the delivery company. If the former, the reliability of delivery is pretty well assured, but the cost is often higher than when an employee makes the deliveries. There is practically no gain in time in either case. But if the services of a delivery company are available it is an entirely different question.

Defining a Delivery Company.

A delivery company undertakes for specified sums the delivery of parcels up to certain weights in a certain territory, using its own vehicles for the purpose. After handing over the packages to the company's driver or collector, the merchant need give no further thought to the matter; it is up to the company to do the rest. If there is any walking the floors at night over expenses, the company does the walking, and not the firm whose packages are being delivered. The company meets expenses and makes the profits solely on the income derived from handling the packages, consequently the strictest economy is necessary, not only in initial expenditures, but in all operating expenses, as rarely more than 15 cents can be charged for a package delivered within a city's limits. When the average operating and standing costs for a horse and

wagon figure at from 6.4 to 7.8 cents per mile, it will be seen that this form of hauling is out of the question for light parcels, so that some form of mechanical propulsion which is cheaper must be used. The commercial motorcycle, in the form of a tricar or side-van, presents itself as the most logical solution of the problem. In a former article (Commercial Motorcycle Costs), the writer showed that the average per mile for such a vehicle would be 3.82 cents, all expenses included.

Where Most Attempts Failed.

There have been quite a number of package delivery concerns started in the various large cities of the United States during the last five years, but most of them failed. As far as the retail merchant and his packages were concerned they were all successes; they delivered the goods, but the floor walking was performed in each case by the delivery concern's officials with too great frequency. The causes of non-success in the order of their importance were: incorrect estimate of costs, improper vehicles, configuration of the territory operated in, insufficient capital, and bad management.

Incorrect Cost Estimates.

From a number of interviews with officials of such concerns, it has been learned that the only standing costs figured were the rental of the building, washer's wages and salary list of the office force. Apparently the cars did not depreciate, there were no taxes figured on, no insurance costs (even when the insurance was written on the cars), and the interest of the money invested in cars was left to be slapped on the profit and loss account. As these costs popped up with astonishing vigor at the end of the year the inevitable happened, and the concerns passed out of existence quietly, except as regards the stockholders concerned. In two cases the writer was able to save concerns more than a substantial loss and enable them to keep going, but only to see them peter out later by defaulting officials.

Another prolific cause of incorrect cost estimates was the unfair attitude of the agents of the cars bought. Up to a year ago it used to be the usual thing to neglect everything but the gasoline, oil and tires in figuring costs, and the worst offenders were the automobile truck salesmen, whose victims danced to the tune of several thousand dollars each. The commercial motorcycle was an unknown quantity, and the buyer took the salesman's word in such matters, and found his expenses eating

up his income in consequence. Mention may be made of the salesman or distributor who disposed of some dozen machines to start a concern on such representation, got his money out of it, advertised the sale, etc. The "loading up" did its work; the concern went under disgracefully, and the territory was a barren field for motorcycle business of all kinds for several seasons.

Improper Vehicles.

Failures through improper vehicles are usually due to the adoption of "hybrids" instead of proper commercial cars. The chief hybrid was the high-speed twin with van attachment, commercially unsuitable for steady service by reason of its weakness, short life, increased first cost and great consumption of fuel and lubricant. In lesser degree comes the purely pleasure motorcycle with the van attached, short life being the chief cause of unsuitability. Finally, the fact that at one time only these two varieties of three-wheeler were available caused the construction of "special" vans, mostly along automobile lines. Wooden wheels, bevel or worm drives, sliding change-speed gears, pressed steel frames and big tires, increased the standing costs while not necessarily the operating expenses, and the net result was the same—failure.

Bodies were usually constructed to hold too much for the capacity of the power plant, and overloading resulted. For example, two ordinary books of octavo size weigh more than a pair of shoes boxed, and if a van body built for shoe carriage was packed with books, the springs would go in a short time. For parcel delivery either the classes of parcels must be restricted or the bodies must be of such size as to prevent overloading.

Territorial Configuration.

Not all cities are adaptable for economical motor delivery of any nature. By this is not meant the business or economic conditions, but the actual formation of the city and the nature of the paving. The taxicab companies have found this out to their cost; certain cities by their configuration never will permit of extensive revenue being realized. It costs just as much to run a vehicle empty as it does with a load, and the most economical conditions require that the vehicle run with load as large a percentage of the time as possible, for the delivering pays, while the running empty does not. This applies whether the "freight" is human or goods of any sort.

Take New York City, for example. It is spread over a long, relatively narrow island, with only one diagonal street—Broadway. Diagonal streets are of advantage to cities and towns, as they shorten total distances all over, but as they give more building surface they are usually crowded with local delivery traffic, which interferes with the through traffic striving to take advantage of the diagonal in place of the straight and cross-streets. New York is no exception to this and is handicapped by its lone Broadway. With even the most careful routing of the parcels to be delivered, the majority of New York hauls will have a good proportion of "empty" mileage. In other words, on account of the shape of the city, the deliveries will be made mostly to the north and south and the returns in the same direction. The diagonal street can only be availed of when the territory in which deliveries are to be made is adjacent to it. The distances being long, parcels will have to be relayed at uptown stations if the business warrants establishing such stations, or the hauls will be extra long and the "empty" mileage even greater.

Paving Conditions.

Another condition or set of conditions is the nature of the paving. In New York there are asphalt, cobbles, wood block, artificial stone block, Belgian block, macadam and dirt. By reason of poor management, the asphalt is generally set on a weak foundation and develops pot-holes and gutters. The cobbles are always badly set and the few macadam pavements are in poor shape. The various block surfaces are fine, but not sufficiently connected with each other to favor motor vehicles. As the pitted asphalt and cobble surfaces are mostly met going north and south, the vehicles give out sooner, and the depreciation increases, boosting the cost per mile. The only hill of importance in New York is the Washington Heights section, which can be reached by easy grades from the southernmost part.

In a city of the "circular" type, like St. Louis, delivery trips can generally be routed so that the empty car will be a short distance from the station when the last package has been delivered. A flat city with plenty of diagonal streets and one kind of pavement (say asphalt) maintained in good shape, is nearly ideal for motorcycle delivery purposes,

Other Causes.

The question of insufficient capital was primarily due to lack of business knowledge, but in part also to insufficient data on costs of the entire outfit necessary to conduct the business. Under the head of bad management comes too many or too few employees, too costly a plant and fixtures, poor soliciting of

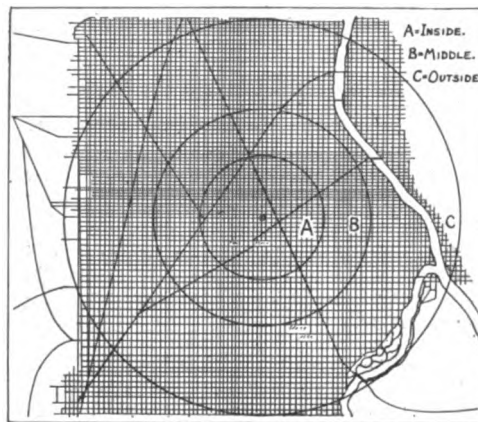
business and, generally, an insufficient stock of cars and parts. All these can be avoided by consultation with proper authorities in the various lines.

Starting a Delivery Business.

The initial step in developing a delivery business is in the survey of the field, the determination of the volume of business obtainable and the prospects of increase of volume. This survey will determine approximately where a central location for the station or garage will be to give the prospective patrons prompt service. In the preliminary survey in approaching prospects it will have been necessary to fix prices for the parcels delivered, and there are several methods of charging for these. The best way is to charge according to district, with additional 5 or 10 cents for packages over certain sizes or weights. The latter condition should not be given much consideration unless the custom in heavy but small parcels warrants it.

District Charges.

In laying out a city in delivery districts, the one served directly from the station is known



as the "inside," and will vary in a radius according to the circumstances. Surrounding this will be the "middle," an approximately circular segment with nearly the same area as the "inside." Lastly, the "outside" district surrounds either wholly or partly the "middle" when the need for this district is apparent. In the accompanying drawing the city is shown laid off in the three districts, and the following tariff prevails:

	In-side.	Mid-dle.	Out-side.
Ordinary parcel (shoe box or of less size).....	05	10	15
Big parcel (hat box, suit of clothes)	10	15	20

Bigger parcels should not be carried; the smaller and more numerous the packages the

greater the returns, naturally. The inside district, or the "five-center" in this case, ends at a 2-mile radius from the station; the middle district's outer bounds are at 3½ miles, and the outer district's limits at 6½ miles. In the inner district, parcels are called for and delivered to any district at the tariff mentioned above, and this is arranged so for the middle district. In the outside district, if the business volume does not warrant the establishment of a relay, or branch station, an extra charge is made for calling, in addition to the regular charges for delivery.

Selecting the Car.

The next step is the selection of the car, as it will be called hereafter. The conditions to be considered are: Ability to negotiate all grades encountered and to carry the maximum load required, a fair turn of speed, ease of control, ready replacement of parts, ample tire equipment, and economical operation. Another and quite vital point, is that the frame should have no moving joints whatsoever, with the exception of a spring fork on the side-van model.

Ideal Not Yet Obtainable.

The ideal car has not yet arrived, but there are signs of its coming apparent. At present, for loads up to 500 pounds, the writer considers three types of great value for general delivery purposes. In the subjoined specifications only the general lines are given, details being left for the manufacturers or purchasers.

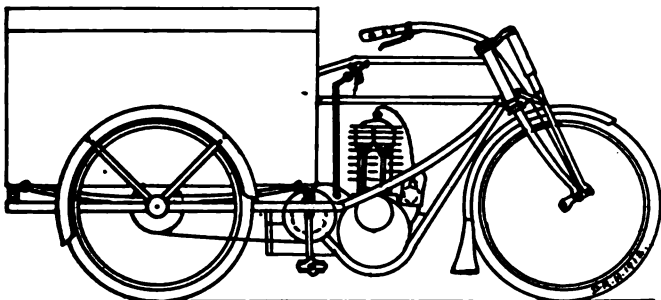
Type 1, side-van—5-horse-power, medium-speed, single cylinder motor, with friction clutch and two-speed gear (planetary or dog-clutch type); chain drive, reinforced standard frame, coaster and band brakes separately operated, 2¾-inch tires, magneto ignition, valve lifter operated by separate lever on bar and clutch controlled from bar or top tube. Side-van frame with front connection as shown, van body sprung all around, end or top doors, detachable hub, 2¾-inch tire. (See drawing.)

Type 2, tricar—same specifications as Type 1 except: Forecar attachment by side members to rear axle and by braces to steering head. Van body sprung fore and aft, front opening doors, 2¾-inch tires.

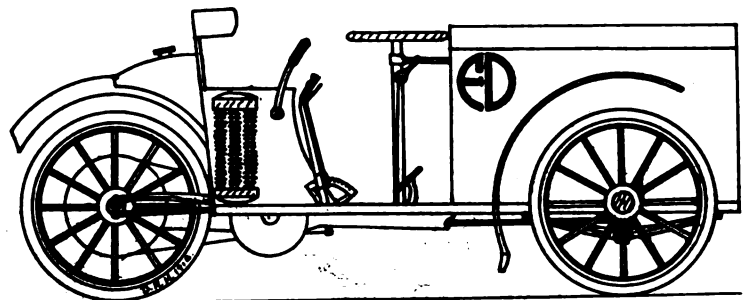
Type 3, tricar—5-horse-power medium-speed, water- or fan-cooled single cylinder motor under driver's seat, two speed planetary or friction change gear, chain-drive magneto ignition, two distinct brakes, channel or angle steel frame, hand and foot (car) control. Wire or tubular steel wheels, 2¾ or 3-inch tires, van body sprung fore and aft, with front doors. (See illustration.)

Reasons for the Selection.

Investigation of a large number of cases show that the 4 horse-power single motor as



Delivery Side-Van.



Delivery Tri-Car.

at present constructed is not well adapted to commercial service. It develops its power at too high a speed, overheating when run on a low gear for any length of time, and occasionally not developing power enough when run slowly. As commercial delivery service requires crawling along in traffic, steady climbs, and slow running over rough streets, a motor that develops its power at slower speeds than the single 4 is needed. As such a motor would be heavier than the 4, a medium-speed 5 h. single should fill the bill; it would develop sufficient power at slow speed to keep the machine going, could run slowly in traffic and on hills, and with a variable gear should go anywhere that the load will permit. A twin motor is out of the question, on account of the increased cost. Two speeds in the variable gear are all that are necessary, and as the machines mentioned will be marketed in the neighborhood of \$500, a planetary or dog-clutch gear can be fitted without excessive cost. A sliding gear would be too expensive, and the same applies to shaft drive.

Two distinct brakes should be on every machine fitted with an attachment of any nature, for safety's sake. Commercially speaking, the second brake may save damage suits in case of failure of the regular brake. The fact that the car has generally to be handled in traffic points to the need of a readily operated valve lifter, independent of spark or throttle, while the handle-bar clutch control keeps the driver's hand on the grips except when changing speed. The $2\frac{3}{4}$ -inch tires are none too big for a 300 to 500 pound live load, and it would be excellent to have the driving tires filled with Newmastic or a like substance instead of air.

The Carrier Type Tricar.

This is not strictly along motorcycle lines, but is a tricar or "carrier" following well-tried patterns. Owing to the large van box cutting off the air-draught, a fan, or water-cooling is advisable, the latter with its radiators being

shown. The motor and two-speed gear are mounted with the drive sprocket between them and a single chain direct to the tubular steel rear wheel transmits the power. One brake is incorporated in the gear, and the other, operated by hand lever, works on the rear wheel. The speeds are controlled by the short lever at the side of the seat.

Tubular steel wheels are lighter than wood wheels and resist shocks to a greater degree. Being welded together, the parts do not come loose as is the case with wire wheels, and the wheels remain true. Wheel steering is shown, but a tiller or side lever could be used as desired. A channel or angle steel frame is as cheap as a reinforced tubular one, and can be repaired by a good blacksmith, to whom a tubular frame can rarely be trusted. It can be bent hot or cold as desired, and involves no brazing.

Side-Van vs. Tricar.

In other delivery lines the question of side-van vs. tricar is in a large measure determined by the nature of the surfaces traversed. Over country roads, for example, the tricar is the better, causing less wear and tear on the machine and having the power to exert a direct push on the load. On city streets, unless absolutely vile, the greater strain put on the motorcycle by the sidecar may be considered to be somewhat counterbalanced by the greater ease in loading and unloading the van, as the box is right at the curb and accessible from top or side as desired, while the body on the tricar is open at the top or front only. Actually, the tricar and side-van appear to run equally well, and it is a matter of individual choice, if the latter is suspended properly from the motorcycle.

Sidecar Should Carry the Load.

To prevent distortion of the motorcycle frame, the load in the van body must be carried as far as possible by the sidecar wheel and frame, and towed by the motorcycle. This means that the load must be well over the

axle, and that the sidecar frame must be supported at the front to prevent the load leaning forward and dragging on the motorcycle. A tie-rod at the center of the front frame member and linked to the steering head will prevent this tipping forward.

(To be continued.)

OFF FOR THE COAST.

HUGH A. FARGO and Harrison H. Crawford, of Atlantic City, N. J., started on September 19, for San Francisco, Cal., by motorcycle. They have letters from Mayor Louis Fuhrmann, of Buffalo, and Mayor William Riddle, of Atlantic City, to Mayor James Rolph, Jr., of San Francisco.

It is not the desire of the young men to make a speed record. They will go through Philadelphia to Gettysburg, then south and over the mountains to Wheeling; thence through Columbus, Dayton, Indianapolis, St. Louis and Kansas City to Denver. From Denver to California the route will depend largely on the weather.

THAT NEW ORDINANCE.

THERE are indications that the recently framed ordinance to regulate the speed of motor vehicles in New York city will be acted upon by the Board of Aldermen at an early date, possibly before the middle of the current month. If this is the case the new measure will become operative about December 1, as it must be on file with the Secretary of State for thirty days before it goes into effect. It is expected that the new ordinance will be adopted without parley, despite the fact that some of its regulations are rather stringent. Speed limits are set very low and the penalties for violations will be heavy.

MAINE TO OHIO.

FOLLOWING is a brief description of a trip made by Harold N. Hanold, of Alfred, Me., on his motorcycle: The tour was to Marietta, Ohio, a distance of 1,200 miles, which Hanold made in just five days. He used exactly seventeen gallons of gasoline and had only one puncture. An hour's stop was made for each meal and there was no night riding. He rode a single Indian and states that the machine made every hill without trouble.

STRICT REGULATIONS.

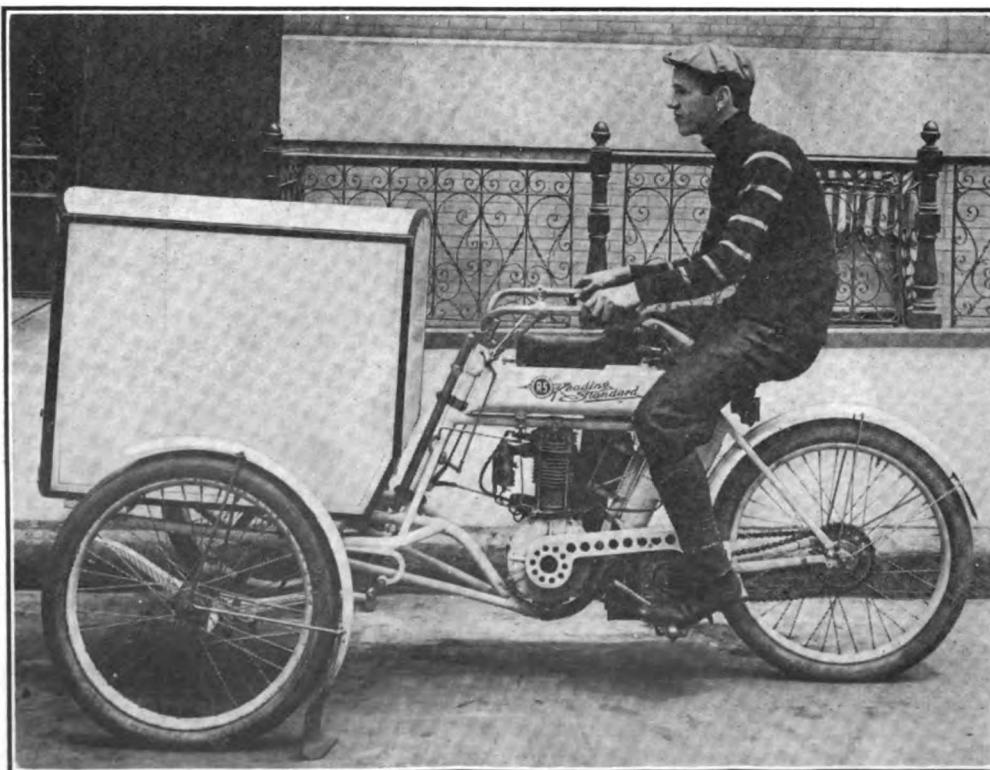
AN ordinance prohibiting tank riding which was recently passed by the City Council of Kansas City, is being rigidly enforced and open mufflers within the city limits are absolutely forbidden. The police have also been instructed to stop all machines without headlights, which are required by the law.

BERKS CLUB RUN.

FIFTEEN members of the Berks Motorcycle Club with headquarters at No. 710 North Ninth street, Reading, Pa., made a run of 60 miles on Sunday, September 29. The riders left Reading at 8 o'clock in the morning and returned the same day.

FRANK BECK, of Joliet, Ill., has just taken the agency for the Indian motorcycle. He also represents the Harley-Davidson.

C. W. APPLEGARTH and C. D. Ferguson, of Lead, S. D., recently made a jaunt to Huron, same state, on their motorcycles to attend the State fair.



A Type of the Delivery Vans Made in This Country.

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President

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COMMENT

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H. N. CONDUCT,
Secretary

FOR F. A. M. TOURISTS.

FEDERATION riders throughout the country will be interested in the announcement that on October 1 the F. A. M. Touring Bureau formally came into existence and took up its work of collecting and filing data relative to roads and general touring conditions. This is a progressive step which should give motorcyclists cause for rejoicing and at the same time arouse in them a widespread spirit of co-operation, for without the latter the task of building up a practical and systematic service for tourists would be doubly tedious and intricate. A number of state maps and considerable information bearing on main routes in the possession of the Touring Department of MOTORCYCLE ILLUSTRATED, are at once accessible to the Bureau and this arrangement permits of answering ordinary queries without further delay. The material thus available, however, is simply an encouraging nucleus for the fund of touring information which the Bureau hopes to have at its disposal in the course of a few months.

ACTING in the belief that something more than mere outlines of routes should be afforded its patrons, the Touring Bureau is now taking steps to obtain first-hand information concerning road conditions so that the prospective tourist may be instructed as to the character of highway surfaces he will encounter. It is obviously of prime importance that the rider shall know whether a given route is traversable only in fair weather or at certain seasons of the year, and it is through the possession of such intimate data that the Bureau will become in time the motorcyclist's most valuable ally. Tabulated statements on roadbeds under varying weather conditions will be collected, district by district and state by state, and renewed at intervals, and it is for the successful development of this plan that dealers and riders generally will be asked to give their generous co-operation. The task of gathering and filing this data will be a formidable one for the Bureau, but the work devolving upon the individual rider will be insignificant by comparison with the general results obtained for the advancement of the project.

IN view of the fact that the current month practically closes the touring season for the eastern and middle western states, the Bureau is giving specific attention first to the Pacific coast territory, and preliminary work has been taken up for obtaining the fullest possible information relative to routes and traveling conditions in California, Washing-

ton and Oregon, the immediate plans being designed to cover California. When all the desirable routes in this state have been outlined an official map will be prepared which may be sold to F. A. M. members at a nominal price, to assist in defraying the expenses of the Touring Bureau. The work will then be carried into other states, southward and eastward. While this system of state routing is being perfected the Bureau will proceed to answer queries and gather general touring data, without regard for state lines, and F. A. M. riders are invited to forward all available information, with special regard for road conditions, garages and hotel accommodations. Tell your touring story briefly, but fully, and mail it to the F. A. M. Touring Bureau, 51 Chambers street, New York City. The Bureau will appreciate this thoughtfulness and dozens of other riders will profit by it.

ROAD COURTESY.

IN almost every club you can hear the same story of riders being forced off the road by reckless motorcar drivers, and the condemnations made are only too just. Short of throwing something at the offender, there would seem to be no method of retaliation excepting legal proceedings, and while the vice on the part of drivers is too common near large centers, it fortunately is not on the increase. As a matter of fact, it is the

A HINT TO DEALERS.

BEYOND a doubt 1913 will be the biggest year so far in the history of the motorcycle industry. When the selling season opens an army of buyers will want machines—and want them quickly. To meet this unprecedented demand manufacturers are arranging for greatly increased outputs; in some cases production figures will be doubled. Are you ready to do your part, Mr. Dealer?

Sales will be rapid, competition keen. To make the most of your opportunities you will need to know the meaning of selling and service efficiency. Without it you will suffer lost motion. The National Motorcycle Dealers' Information Bureau helps dealers to turn every prospect into a sale. It gives them practical assistance in advertising and in obtaining general publicity. It gets results; it gives them moral backing—and it makes no charge. The address is 23 East Ohio street, Indianapolis, Ind. A post-card will start something. Mail it today. Merely state that you are a live dealer after live business and see what happens.

professional driver that does the mischief, and not the owner-driver, but "all drivers look alike" to many motorcyclists. I have in mind a case that happened not so long ago near New York where I was driving a car and, seeing a motorcyclist trying to pump up a 2¾-inch tire with a little frame-pump, I pulled up and offered the big, compound foot article carried on the car. The reply was pretty gruff, but I got down and pumped the tire myself to the proper gauge pressure. As I put the pump back under the seat the rider mounted, pedaled, put in his clutch and, kicking up the stand, went off—no thanks coming my way. Then came the inevitable "I told you so" from my passenger, and a discourse on the general actions of the motorcyclist. On comparing notes with the passenger, I found that he had been obliged to run up a bank on one trip to avoid cutting down a motorcyclist who dashed suddenly out on the wrong side at a corner, and then laughed at the fright of my friend's lady passenger. Hence the lack of love between the drivers of the two and four-wheeled vehicles.

THE lot of the reformer is a hard one, but I claim that if you treat all road users with consideration you will get it yourself. It takes all kinds of people to make a world, and the reckless driver of any vehicle will "get his" sooner or later, and you may be the agent by means of which the "come-uppance" arrives, without actually shooting or maiming him. It practically always pays to be polite. I say practically always, but some readers might not agree on this point if they had the following experience.

IN the early days of the two-wheeler, when lever control on the top tube was new and springless frames were universal, a party of riders was bowling along at about 20 miles per hour. As they passed around a turn in the road, a restive horse, driven by a lady, hove in sight, and the riders lifted their valves and stood up on their pedals. The rider nearest the horse back-pedaled with such vigor that the coaster brake locked, the machine stopped and he kept on through an arbor vitae hedge. As he staggered to his feet he heard the fair driver say sweetly: "Thank you," and then came the clump-clump-clump of the horse's hoofs. Question—Did he get thanked for eliminating himself so thoroughly, for his quick stop, or for his graceful dive?

ANOTHER rider met a forlorn young woman with a badly punctured bicycle tire, and stopping to offer assistance, was

asked to deliver an important note at the railroad station, five miles away, to a man whose description she gave. Ever gallant, the rider took the scented missive and scorched for the station to intercept the man described. He took a hard tumble at one turn, but remounted and sped on. Reaching the station and seeing his man, he explained the circumstances. The recipient thanked him and on opening the note showed unmistakable signs of cholera. The rider accordingly prepared for battle, but was only handed the note as the man boarded the train. It read as follows: "James, dear, don't forget Tootsie's collar."

AUTO RACING WANING?

INTEREST in the automobile race classics scheduled in Milwaukee this month is not as keen as had been anticipated, and the promoters of the big program admit it. Although there promises to be some interesting competition among cars of recognized worth, the fields in most instances will be comparatively small. American car manufacturers have, generally speaking, withdrawn their support from racing, and most of the glory, such as it is, will be gathered in by a few foreign cars.

The trend of things follows similar lines in the motorcycle field, and the disposition of manufacturers to keep their hands off is strengthened by pitiful occurrences such as the frightful accident in Newark recently.

There is pleasure, comfort and satisfaction in moderate speeds a la motor. The fascination is quite irresistible to the average man and woman. To most of us, too, there is something wonderfully attractive in the spectacle of drivers piloting the little or big speed demons at a space-annihilating rate. But the possibility of an accident is no doubt the biggest factor in making interesting the sight of a racer traveling at an eighty or ninety mile-an-hour clip. Plainly speaking, it's a barbaric thirst for blood that makes high speed so popular with the masses, and it's nothing short of madness for gold or excitement that permits of indulgence in the pastime at one's own risk.

Although most of us will be taught by nothing short of some terrible experience which

brings the truth to our very doors, the fact remains that excessively high speeds are a detriment to any sport, however delightful its exercise in moderation may be. The mile-a-minute road-burner may be always in our midst, but never in the wide world will he help to popularize the sport by his arrant abuse of it.

ACCIDENT PREVENTION.

COMPARATIVELY little is known, even in official circles, of the American Museum of Safety, and it is quite likely that this mention of the name conveys no concrete idea to nine out of ten readers, despite the fact that the institution is one which deserves at least the moral support of all road users. The museum is located in New York City, and has for its object the prevention of accidents and the general preservation of human and animal life. To this end special attention is given to traffic conditions, and simple rules of conduct for emergencies are worked out for adults as well as children. Mrs. William Tolman, wife of the director, has instituted classes which meet at the headquarters, 29 West Thirty-ninth street, and by means of models and diagrams she instructs the children as to correct and incorrect methods of crossing a street, and how otherwise to avoid trouble. That such instructions are of real value in the campaign to lower the percentage of street accidents cannot be denied.

AT present only New York children can be accommodated, as the means of the museum are limited and no fee is charged, but the authorities count upon extending their field to other cities at a comparatively early date. It is argued—and not without reason—that the traffic instructions referred to should be included in the curriculum of every public school, and such a general adoption of the plan is one of the aims of the Museum of Safety. It is the belief of the writer that seven out of ten motorcycle accidents involving a pedestrian are brought about through erratic and confusing action on the part of the latter. The pedestrian starts to cross the street, suddenly discovers the approaching

motorcyclist and then flounders nervously about until he is run down, or the motorcyclist has thrown himself and his mount to avoid a collision. It is to accidents of this class—easily preventable if the commonest rules of traffic are observed—that the Museum of Safety is directing its attention particularly. It is tackling a big and vital movement along practical lines, and is worthy of generous support.

MEDAL RACE IS CLOSE.

BALTIMORE, Md.—Every member of the Maryland M. C. who is striving to win the diamond medal offered for the best attendance record at runs will be put to a severe test before the first of the year, when the contest ends. Captain Staniford announces that he will call runs for every Sunday from now on, no matter how cold it may be or how much snow is on the ground. On Sunday, September 22, the club held the biggest run of the season, 100 riders joining in a spin over the new boulevard to Annapolis.

W. S. Fisher, the "grandpa" of motorcycling in Maryland, is making plans for a three-day tour through the Valley of Virginia.

HUDSON COUNTY'S SQUAD.

IN the accompanying photograph is shown the special boulevard squad of motorcycle officers attached to the Hudson County (N. J.) police department. This staff is one of the most active and efficient in the East and its members have many acts of heroism and daring to their credit. Not content with watching speeders, the Hudson officers render emergency service at fires and accidents, and half a dozen of the riders have stopped runaway horses after chasing them down at top speed on their machines. It goes without saying that Hudson County is proud of this squad, and the boys are leaving nothing undone to live up to their reputation. The officers, from left to right, are as follows: Schlemm, Bannon, Hanley, Schuler, Murray, Southard, Dolan, Boyle, Lieutenant McNamee, Chief Clossey, Lieutenant Broadhurst, Ryan, Schroeder, Coffey, Tuttle, Frost, Neary and Cuddy. The headquarters of the squad is at 2840 Hudson boulevard, Jersey City, N. J.



Motorcycle Squad That Has Established a Remarkable Reputation for Efficiency on the Hudson County Boulevard, Jersey City, N. J. Chief Clossey is the tenth rider from the left.

VISITING THE STATES.

Ontario Motorcyclists Enjoy Trips into New England, and Some Even Reach New York City.

TORONTO, Can.—A number of Ontario riders have been filling in the Autumn days with extensive excursions to distant points. Several have picked out the popular Buffalo to New York route, while New England has also been the stamping ground for the more venturesome. One of the biggest tours yet taken by a Toronto rider was Charlie Neilson's ride on an Indian seven to Boston and return, which reached a successful termination on a recent date. The puncture fiend only pricked his tire once, and otherwise he found that he had nothing to do but enjoy it. On the outbound flight, Neilson stopped over at Springfield, where he inspected the Hendee factory. Following Neilson's delightful experience other Toronto riders now propose following the same route before the snow flies.

Frank Benson, the secretary of the London M. C., recently saw the lights of Broadway when he piloted an Indian seven and sidecar to the Big Village in company with a 175-pound passenger. The only excitement of his ride was afforded when a sample size cyclone carried his machine, sidecar and all, completely off the road, but no damage resulted.

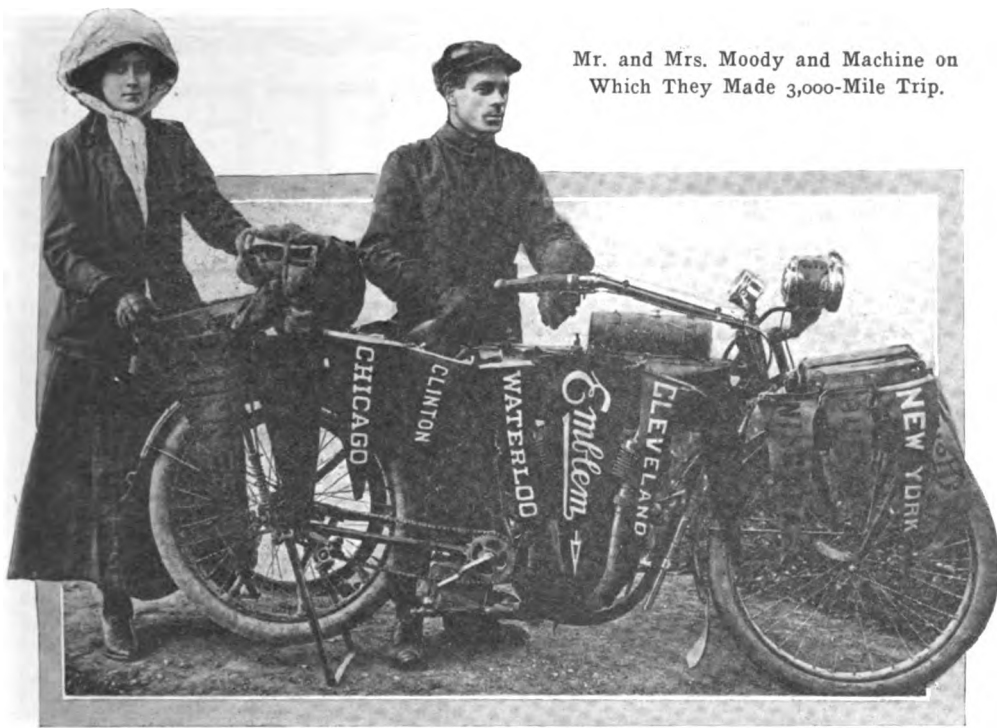
H. J. Stillaway, of Toronto, also recently covered the popular New York State route on an Indian, making Syracuse the turning point in his invasion. Harry Langford, of Ottawa, Ontario, recently Excelsiored from that city to Toronto, a distance of 300 miles, without mishap.

CLAUDE WITMER, of South Bend, Ind., is planning a long motorcycle jaunt, to cover 6,000 miles.



President Spencer, of the Canadian Motorcyclists' Association.

Mr. and Mrs. Moody and Machine on Which They Made 3,000-Mile Trip.



LONG-DISTANCE TOURISTS.

THE accompanying photograph shows Mr. and Mrs. E. S. Moody, of Glencoe, Minn., who recently finished a tandem tour over 3,071 miles of good, bad and indifferent roads. They covered 3,718 miles in all, but of this distance 647 miles were traversed in an automobile. The story of their trip to Chicago and then to Toledo, Cleveland, Erie, Pa., and Buffalo and finally to Niagara Falls, was told in the September 19 issue.

EN ROUTE TO THE COAST.

C. E. PARKER and Harry E. Patterson, of Pittsburgh, Pa., recently arrived in St. Louis, Mo., on their way to Los Angeles. While in St. Louis they were guests of the Hurck Motor and Cycle Company. They ride 7 h. Indians, Mr. Parker's being a Tourist Trophy model. They reported no machine trouble, but said that the roads in Illinois were not up to the mark, those in Pennsylvania and Ohio being considerably better.

A GOOD DAILY AVERAGE.

P. A. PAULSON, of Hettinger, S. D., and P. Paul Zick, of Big Stone, N. D., recently stopped at Stoughton, Wis., on a trip to Buffalo. Paulson rides a 7 h. twin and Zick a 4 h. single. They report fairly good road conditions, and state that they had no trouble in making 225 miles a day.

TWO GIRL RIDERS.

THE Harlem Motorcycle Club of New York City boasts of two girl members, who generally accompany the boys on their trips. They are Misses Florence and Ethel Willis.

MOTORCYCLE ANGLERS.

STREAMS near San Francisco, Cal., have been "fished out" and as a result motorcyclists are riding to the Walala River district, where the trout are still plentiful.

Secretary Gibson is working on plans for fire insurance on motorcycles belonging to F. A. M. members.

BUSY DAYS IN SAVANNAH.

SAVANNAH, Ga.—Members of the Savannah Motorcycle Club are looking forward to a busy winter season and say they will furnish enough news to keep the boys up north supplied until they are again able to ride. An early event will be a 120-mile endurance run to Statesboro, which will probably take place the latter part of October. The club is trying to arrange with the Augusta and Macon clubs to meet the riders in Statesboro for a reunion. On Christmas Day the club will hold a race meet over the Grand Prize course. Lee's birthday, which comes in January, will be celebrated by a run to Bailey's Place, where the boys will do justice to an oyster roast. Following this they will hold a 200-mile endurance contest over the Grand Prize course on Washington's Birthday. Besides figuring in a lantern parade the club will have its final endurance run to Belfast and return, a distance of sixty miles, in March.

A TOUR OF 1,500 MILES.

L. M. KRAMER and E. H. Gress, motorcyclists of Dayton, Ohio, recently reached Wheeling, W. Va., on a 1,500-mile trip. They visited many cities en route, among which were Cleveland, Buffalo, Albany, Boston, New York, Philadelphia, Hagerstown and Cumberland. They report the road conditions as being very good except in West Virginia.

A 2,000-MILE JOURNEY.

J. M. JACOBY and his cousins, N. B. and J. C. W. Jacoby, of Hutchinson's Station, Ky., recently arrived in Louisville, after a tour of four weeks on their motorcycles, in which time they covered 2,000 miles. They visited Cincinnati, Detroit, Lansing, Milwaukee, Chicago and Louisville.

ROUND-THE-WORLD TOURISTS.

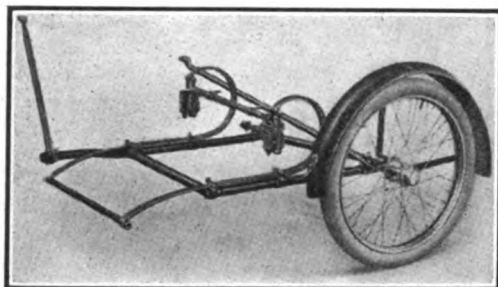
I. R. MUNROE and P. Powers, motorcyclists of Australia, are in the United States on a jaunt around the world. They left Australia in April and have already toured England, Scotland and part of continental Europe.

ENGLISH NOTES

BY BRITISHER

Carbureter Controversy Is Interesting Many Close Followers of the Sport in England—Two of the Latest Sidecars—Protection for Rider From Heat of the Motor.

AMERICAN carbureter design differs so widely from British practice that our controversies in that department may not keenly interest your riders, but we are all agog at the ferocity of the warfare. The influx of duffers into the motorcycle world, due to the perfection of "no-trouble" machines which are good hill-climbers, has created a demand for a vaporizer which eliminates tap twiddling. Three types are fighting for the top rung. One is semi-automatic. It is of the usual British two-chamber type; the float is isolated in a separate barrel, and the jet is situated in a chamber of its own; all air is inhaled through fixed orifices along a line of travel at right angles to the jet axis and the jet is set behind the sliding piston which forms the



Rex Sidecar Chassis.

throttle valve. This piston chokes the flow of mixture, and also chokes the suction on the jet.

Lever Construction.

These vaporizers have two levers, but the air lever has only two positions—open and shut. It is shut for starting, after which it is banged right forward, and kept there all day, since movement of the choke-throttle suffices for all variations of speed and provides an approximately correct mixture at all speeds. This is at the moment the most popular type—a good starter, highly efficient and quite economical. Next to this in order of favor come the vaporizers which demand tap twiddling, and make some demands on the rider's intelligence. They vary in details of design, but are practically all of the two-chamber, two-lever type. Some have plain jets and plain airholes, each controlled by a sliding piston; others have variable jets, and even variable choke tubes, rare exceptions possessing three, and even four levers. A popular example of the more complex type utilize a stub jet lever in conjunction with handlebar air and gas controls.

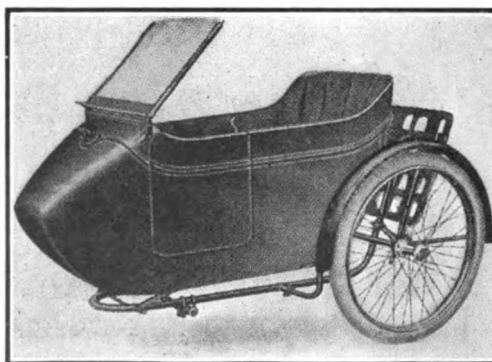
The Truly Automatic Type.

The third class consists of the truly automatic one-lever type, and includes a variety of designs. A favorite example consists of two jets, each possessing its own choke tube. One jet is very large, with a choke tube to suit, and another very small, with ditto choke; as the throttle piston rises, it uncovers an extra air port towards the limit of its travel. This is a very efficient and convenient design, when the jets and choke tubes have been accurately adjusted to any given engine. One of its outstanding merits is the way you can kill "conking" by shutting the throttle down smartly so that the engine is confined to the small jet. Supposing an engine knocks when asked to pick up from practically a standstill in city traffic or on the hairpin bend of an abnormal hill; the "knock" ceases instantaneously if the gentle suction is concentrated on the small bore of the tiny jet and choke tube.

The popularity of change speed gears is sharpening the demand for semi-automatic and automatic carbureters. The owner of a three speed gear changes gear a hundred times a day; with a sensitive two-lever vaporizer he has to switch his carbureter control every time he changes gear; probably to shut the air down a notch; with an automatic or semi-automatic, he need not touch the gas controls.

Fin de Siecle Sidecars.

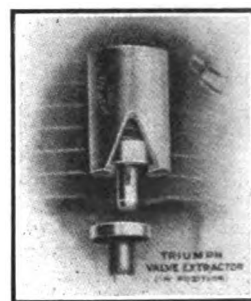
THE two accompanying cuts show examples of modern sidecar design. The stripped chassis is a Rex, of which the special feature lies in the double coil subsidiary springs fitted to the shackles of the main springs, which damp down the coarse oscillations of the big Ceas. The other is a Canoelet, fitted with adjustable talc windshield and folding luggage grid.



The Canoelet Sidecar.

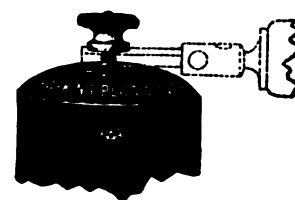
A Valve Extractor

EVERY motorcyclist can trace his bluest profanity to moments when he has endeavored to extract an exhaust valve against the pressure of a 40 lb. spring, with no other tools than his fingers and a screw-driver. There is a growing and laudable tendency on this side for each engine maker to provide some simple and portable tool, by the aid of which the most refractory spring can be tamed. The cut shows the neat little vestpocket tool provided with British Triumph engines. The cut is almost self-explanatory. A steel cylinder is split vertically, its top and bottom plates being notched to catch below the spring cap.



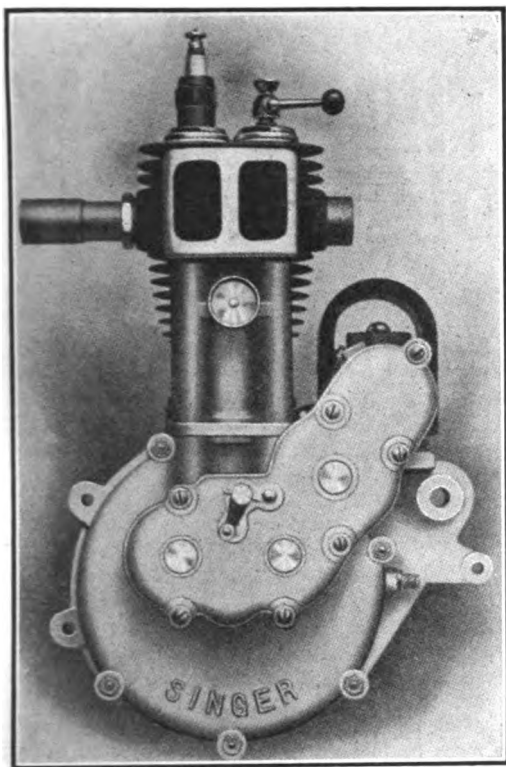
For the Mudlarker.

THE two blocks inset in this paragraph show two tiny accessories which are invaluable for those sturdy spirits who motorcycle in all weathers. One is a sparking plug umbrella, which insures regular ignition



in the heart of a tornado. It catches the impinging rain, and guides it down clear of the mica or porcelain insulation to hiss harmlessly into steam on the hot head of the cylinder. (A similar fitment is used to a considerable extent on machines in this country.—Ed.) The other accessory is a waterproof terminal, scarcely essential with the modern magneto, but very useful with dry cell or accumulator ignitions, which—with their many connections, are rather apt to get "rained out" in a downpour.





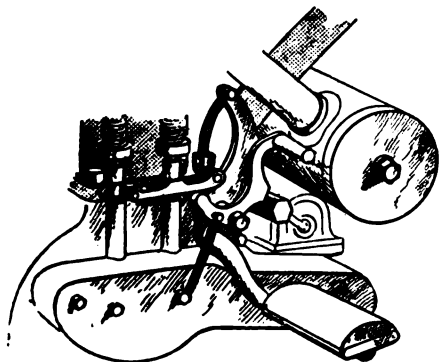
Singer 2 1/2 h. Motor.

No More Burnt Trousers.

THE above cut shows a shielded Singer engine. A skeleton plate clips round the valvechest, and without preventing free radiation of heat, effectually prevents a rider's clothing from being scorched by the hot cylinder. The same cut gives details of a valvestem cover, held in position by a single milled nut. This cover silences the clack of the valves against their tappets, prevents oil being flung on the rider's leg, if oil should escape from a worn tappet guide, and safeguards both tappet and valve guides from the ingress of dust and grit.

A Duplex Valvelifter.

THE line sketch herewith appended shows a detail of interest to roughriders. No catastrophe is more distressing than an irreparable derangement of the valvelifter. It renders starting an awkward job under any circumstances, and if the throttle be leaky, and the magneto has no switch, stopping becomes a matter of equal uncertainty. The sketch shows the duplex valvelifter embodied on the English "L. M. C." machines. Only one lever is used, but it is provided with both pedal and handlebar controls, a flexible wire being coupled to the lever above, and a footrest



Foot-rest and Foot Exhaust Lift Lever.

pedal being added below. Only a very dire accident could disorganize both controls, so that the rider can rely on always being able to operate his compression release. The pedal is very useful for relieving the fingers of strain in coasting down prolonged grades.

A YOUNG EXPERT.

GEORGE LOFTES, ten years old, of Providence, R. I., can no longer claim to be the youngest rider of a Harley-Davidson motorcycle in the United States. This honor must now be given to Carl Worle, of Tampa, Fla., who is only eight years of age and who handles his 4 h. magneto model like a veteran.

COVER FOR CLEVELAND BOWL.

THE Luna Motordrome is to have a cover, and an entirely new track is to be laid. The old boards are to be torn up. The top is to cost in the neighborhood of \$10,000.

EDWARDS ON HIS UNICYCLE.

THE unusual photograph reproduced herewith shows Court Edwards on his unicycle at the Riverview Motordrome in Chicago. The picture was taken only a few days before the accident which resulted in the death of Edwards, and by a peculiar coincidence it shows the exact spot where he collided with another rider while driving his racing machine at top speed. Edwards was a plucky rider, always willing to take a sporting chance, and a favorite with the spectators and his fellow speedster. The photograph was taken by H. P. Cook, of Chicago, a racing enthusiast.

**A THREE-DAYS' TRIP.**

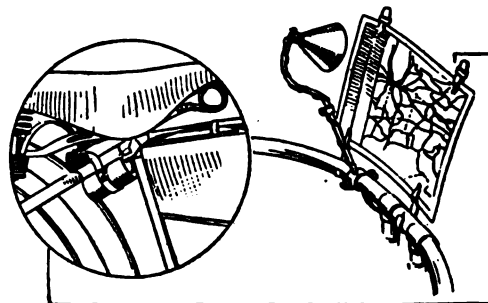
MATTHEW ROTH and Robert Ferritt, members of the Harley-Davidson Motorcycle Club, of Philadelphia, recently made a three-days' jaunt on their motorcycles. From Philadelphia they went to Trenton and Newark and then up the Hudson and back to New York City. The next morning they crossed over to New Jersey via Staten Island and rode through Long Branch and Asbury Park to Lake Como, where they stayed over night. From Lake Como they proceeded to Lakewood and Atlantic City and returned to Philadelphia.

MOTORCYCLES FOR SCOUTS.

SHERIFF, WALTER K. McANDORY, of Birmingham, Ala., recently purchased two new motorcycles to be used by his deputies for scouting purposes.

A CHART LIGHT.

IN the accompanying illustration is shown a neat little electric light for use on the handlebars of a motorcycle in connection with



a road chart. As it is during the hours of darkness that a route card is most necessary, the value of the lighting equipment will be at once apparent to the experienced tourist. Current for the light is supplied from a small dry battery which may be placed under the saddle as shown in the cut. The diagram is reproduced from a recent issue of *Popular Mechanics*.

ESLER'S EVENTFUL TRIP.

JOE ESLER, president of the recently organized Quincy (Ill.) Motorcycle Club, has been doing considerable road work lately and on one of his trips he reports encountering seventeen hills in a five-mile stretch. He left Quincy for Golden, 35 miles distant, and experienced no trouble until he started the return trip. He started back about 2 p. m., with rain threatening. Camp Point, six miles away, was reached without trouble; then after riding along the edge of a newly graded road, and passing six of the seventeen hills, Esler found plenty of excitement. The rain came down in torrents and the clay roads were soon in wretched condition. The rider finally reached the top of the eighth hill and decided to stop at a farmhouse. When he was ready to leave some time later, the farmer told him he had better leave the machine as it would be impossible to ride the hills. Following this advice Esler walked three miles to the next town and took a train back to Quincy, sending for his machine on the following day.

A WASHINGTON WINNER.

ONE of the prize winners in the recent endurance run from Hoquiam, Wash., to Tacoma, was L. L. Luce, who appears in the accompanying photograph with the Flanders

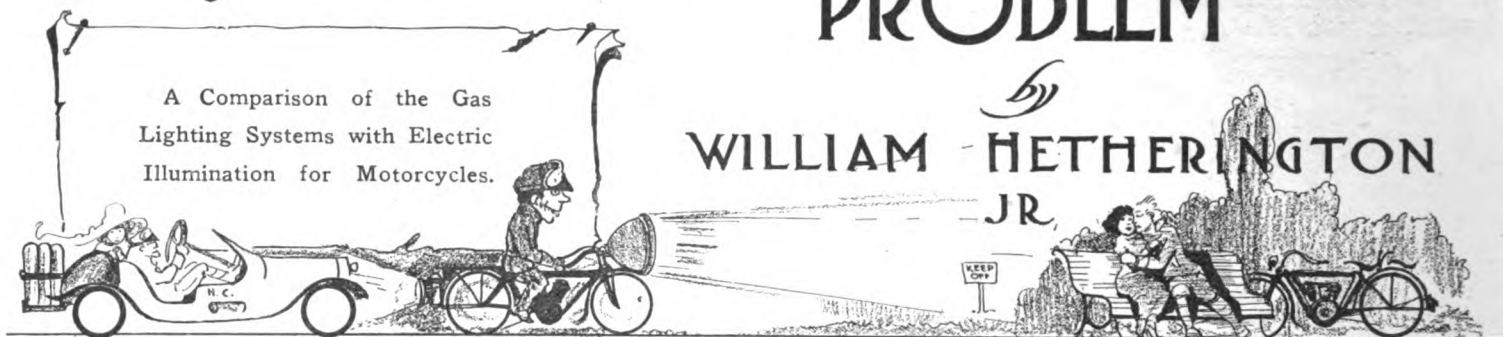


machine on which he carried off the awards. His winnings in the run are to be seen on the ground in front of the machine.

SOLVING *the* LIGHTING PROBLEM

A Comparison of the Gas Lighting Systems with Electric Illumination for Motorcycles.

WILLIAM HETHERINGTON JR.



ONE of the most interesting studies on the 1912 F. A. M. National Tour to Columbus concerned the lighting equipment carried on the various machines. In a body of riders, all of whom were riding under similar conditions, some general system of lighting might be looked for, but it was difficult to find two riders with the same equipment. Each individual had his own ideas about what should constitute a good lighting arrangement, and the choice of equipment ranged from the bicycle oil lamp to the modern acetylene and electric lighting systems.

In the early days of the motorcycle industry little attention was paid to lighting equipment by manufacturers, with the result that the old style bicycle lamps were utilized on motorcycles. As the industry expanded, however, the necessity for providing a more suitable lighting equipment was recognized by observing lamp manufacturers, and as a result the rider of today is offered a variety of lighting systems suitable for any condition. Motorcycle manufacturers also realized the necessity for providing suitable brackets for carrying lamps, and provision has been made in this direction

Selecting the System.

The proper lighting equipment to install on a motorcycle depends primarily on the use to which the machine is to be put. It would hardly be considered necessary to install a powerful headlight, for example, if the motorcycle is to be used solely for city use. An ideal lighting equipment must be efficient, reliable and durable. For city use an efficient oil lamp fulfils all requirements. It occupies little space, gives ample light and requires little attention.

The combined lamp and generator has the distinct advantage of being compact, and gives a good, strong light on a single charge, lasting about eight hours. It is necessary, of course, to refill the water reservoir frequently. The separate lamp and generator has all the advantages of the smaller combined type, and in addition does not require as frequent renewals of the charge. Gas generators require more or

less attention, and a rider who is not careful is likely to experience trouble, at which he condemns the lamp when the fault really lies with himself.

Any motorcyclist who has ridden during the winter months, dependent upon a lighting equipment in which water was one of the elements, knows that it is no fun to find an ice cake in place of the water supply when he tries to light the lamps. The advent of the gas tank eliminated most of the disadvantages of the separate generator supply, and this form of illumination has gained wonderful popularity.

Electric Lighting.

The newest type of lighting equipment for motorcycles is the electric system. As the separate gas tank system of illumination has become the most popular, a comparison of this type and the new electric system will prove of interest.

The essential features of reflector units are efficiency of illumination, capability to withstand heat, durability and compactness. The reflector should also be dust and moisture proof, as the efficiency of the mirror would otherwise be materially reduced. There are in common use three types of reflector mirrors: The metal type, mangin mirror and parabolic mirror.

The latter possesses a certain advantage over the other two. On account of its reflecting characteristics it is often preferred over the mangin mirror, and is the one in general use.

The method of grinding the surface of the mirror plays a most important part in its reflecting efficiency, and the silvering on the back should be done in a most careful manner in order to obtain the best results. By efficiency of illumination is meant the maximum beam of light which is projected out of the lamp. Very little light is absorbed by the reflector mirror; therefore nearly all the light produced is utilized, and in an electric headlight, with the lamp in the geometrical focus, practically all of the illumination is projected where it will do the most good. This is not true of the gas headlight, with the burner out of the geometrical focus, as by referring to drawing "A," it will be seen that all of the light included in the angle X is practically wasted.

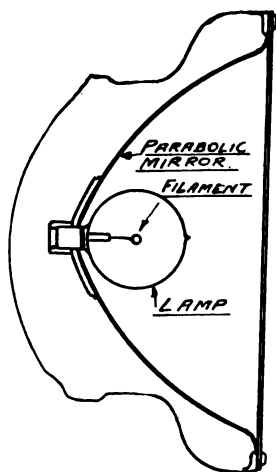
Focal Adjustments.

A sliding adjustment has been developed for the electric type of headlight, which permits the changing of the focal length at the rider's will. The luminous center of the lamp socket may be changed relatively to the focus (Continued on page 58.)

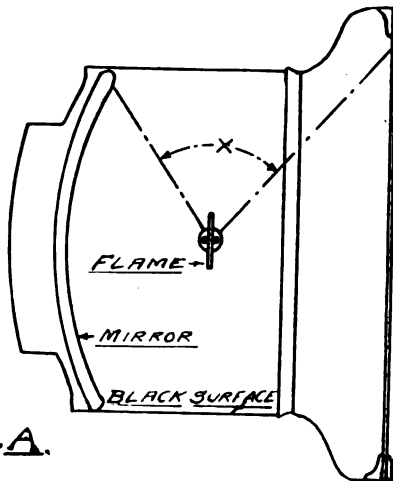
A CLUBHOUSE NEEDED.

TORONTO, Can.—"We want club quarters," is the cry that went up at a recent meeting of the Toronto M. C., at which the attendance was well over one hundred. With the racing and touring season drawing to a close, the demand for a central meeting place for the members is growing in strength, and it is now intended to establish a large clubhouse, included in which will be pool tables, assembly room, gymnasium, repair shop, garage and other conveniences. The membership of the club is now over the two hundred mark, but it is felt that attractive quarters will accomplish considerable in inducing the city's many independent riders to join.

HARRY S. BEERS and George H. Abbott, of Buffalo, N. Y., recently completed a motorcycle trip through northwestern Pennsylvania and New York.



ELECTRIC HEADLIGHT



GAS HEADLIGHT

W. H. Jr.

A YANKEE ON EUROPEAN ROADS

MAXIMILLIAN ST. GEORGE

AFTER three hours of rather rough sailing I arrived in Ostend, Belgium. Here I had no trouble whatever at the customs house. The officer merely glanced at my customs ticket and international pass, asked me if the description of the motorcycle was correct and then allowed me to pass on. At my request two sailors, who had shown particular interest in my machine, escorted me to a hotel where lodging and meals were obtained at small cost. Here, also, my room and bed were all that could be desired.

The next morning, after eating breakfast, I set out for Bruges. The roads were very rough; I believe they are worse than any stone-paved street in New York or Chicago. There is always a narrow cinder path for bicycles, but this is forbidden to the motorcyclist. However, I risked arrest and rode on it, only to find that it also was quite bumpy, but better than the cobblestones. When stopped by a gendarme I would plead ignorance and mumble some complaint about the road, pass on, riding the stones until out of sight and then returning to the side-path.

These stones were the cause of considerable tire trouble. The outer tire would not be cut or punctured, but the inner tube was often split. I had two punctures of this character before reaching Bruges and three on the road to Ghent. From Ghent to Brussels I did not meet any gendarmes and so was able to ride the cycle-path and thus avoid punctures. The courtesy and hospitality of the inhabitants somewhat offset the troubles of the road. The distance from Ostend to Brussels is only eighty-one miles, yet I did not reach the latter place until 3:30 p. m., rather slow going.

From Belgium Into Holland.

In Bruges I bought ten litres of gasoline for fifty cents. In other places it cost about twice as much; I paid forty-five cents for five litres in Ghent. From Brussels the tourist should enjoy a trip to one of the magnificent parks, six miles out from the city. Here may be seen the house which is used by any distinguished guests of the king. At a museum here may be seen a great variety of interesting objects. It goes without saying that the motorcyclists will find it worth while to take a trip to Waterloo, the scene of Napoleon's last battle. From Waterloo a splendid road leads to Gwendoel, Moline and Antwerp and on to Holland. I took the route through Fervuiren,

Lourain, Tirelemont, St. Trond and Tongres to Masstricht, Holland, and had good macadam roads part of the distance. This was a day of misfortune for me, however. I lost my water-proof cap, had two blow-outs in one of my inner tubes and took a spill when traveling at the rate of twenty-five miles an hour. As a result of the spill my machine got a punctured tire, a badly bent footboard and a caved-in exhaust pipe. A mechanic at St. Trond fixed everything for twenty cents.

At the Dutch customs office I had merely to show my international pass and customs ticket for Holland. The officer did not even compare the description with my machine, simply asking me if it was correct. All through Masstricht, as in Belgium, the street pavements are bad. One would think the builders wanted to see how roughly they could lay the stones. The roads in Holland, however, are generally either macadam or brick paved and both are very good. They are lined on either side by rows of big trees. I rode along one of these roads at thirty miles an hour to the home of a friend, where I stayed overnight.

Hills and Fine Scenery.

The next morning at 9:30 I started for Germany. The roads were good and traveling was unhindered. At the German customs house no official appeared. I approached slowly, stopped for a minute and then rode on. The dreaded German customs had been passed. The roads at once became very good. The road from Juelich to Cologne continued good and were lined with fruit trees. Good substantial meals may be had at very reason-

able rates. A good road leads from Cologne to Bensberg, Engelskirchen, Gummersdorf, Olpe and Westphalia. Along this route I enjoyed some of the best scenery of the trip. I stopped for the night at a roadside inn a mile or so from Olpe.

The price of gasoline ranges from 9¼ to 14 cents per litre. Dapolin, which is considered a high grade of gasoline, sells for about eleven cents per litre. I rode on through a number of towns and had a couple of steep ascents to climb. That night I stopped just outside of Hirschberg and was surprised to meet a friend from my home town.

In the morning I began the passage of the Harg, the most interesting and beautiful mountainous country in western Germany. I rode up the Seiber river over a poor road to Seiber. From here the road is good to Andreasberg. At this point is the steepest climb I ever made. My machine reached the top much to my surprise and to the disappointment of the natives who had been expecting it to fall backwards. Then there is a long ascent to Brownloge and one to Elend. After that comes a long coast to Rotehutte and Elbingerode. Here the Harg ends and the country in general descends to Heimberg through the Dricksthal. From Pfefferkrug through Halberstadt, Magdeburg, Potsdam and Berlin the road is good.

A couple of times along the road when trying to find the cause of a flat tire I received help from some passers by. In one place they not only got a pail of water, but brought out a stool for me to sit on. From Magdeburg to Potsdam I rode from thirty to thirty-five miles an hour. Then along the splendid Kronprinzessin Strasse I was able to make forty-five miles an hour to Berlin.

Hard Luck in Berlin.

I made a comparatively short stay in the German capital, being anxious to get out on the road again. My motorcycle had been left with a mechanic to have the spark control repaired and a new inner tube put in the rear tire. I called for the machine the morning I was to leave, and was dismayed to learn that a tube of the size required could not be obtained in Berlin. However, the dealer happened to have a tube from an Excelsior, and as it was rather old and none too soft and elastic, he let me have it for six marks (\$1.49). After dinner I set out for Jossen, but had not



Scene on Lake Aussee, Switzerland.

gone far when an accident befell me, and I had to go back for repairs. That evening, after calling for the machine, I took my cousin out for a ride on the carrier, which resulted in another minor accident and more repairs.

On account of a heavy rain the next morning I was unable to start before 11 o'clock. All went well until I was about three miles from Jossen, or 15 miles out of Berlin. I was just entering a small town when a dog sprang out at me. My front wheel swerved and struck a stone, breaking the front forks and bending the wheel out of shape. Several spokes were also torn out. There was only one mechanic in the place, and he was unable to repair the machine. While I was wondering what to do a large auto truck, drawing a second truck, came along on its way to Berlin, and the driver consented to take me with him. We were soon in the capital again, and the driver carried me to a mechanic, who said he could fix my motorcycle if anyone could. The mechanic and his assistant set to work, and

by 11 o'clock had the task finished. The entire job cost only \$2.38.

Striking Mountain Scenery.

I was out of Berlin by 8 o'clock the next morning, and had good roads through Jossen, Golssen, Lukau and Elsterwerda. From Elsterwerda to Saxony the road was alternately rough and sandy, and from Saxony, through Grossenhain to Dresden, it was very good. The road passes through the beautiful Moritzburg, a royal hunting lodge, six miles north of Dresden. Road menders were at work all along the line, and it is quite probable that the stretches of bad road mentioned will soon be in good shape. Early in the afternoon I left for Bastei, a peak overlooking Saxon-Switzerland. This is a beautiful mountain region, filled with grotesque, pine-covered sandstone peaks and gorges. In rounding a sharp curve near Bastei I ran into a low ditch and broke off the nut holding the supports of the footboards, but had no difficulty in making repairs. From Bastei I rode back a short dis-

tance to a good road which leads to the main route to Schandau. This is a summer resort in the heart of the mountains, and the surrounding scenery is grand. The ride to Bastei and Schandau is the finest I have had in Germany.

At Schandau I crossed the Elbe over the Körugen Carola Brücke. The road is good to Krippen, where it becomes poor, with steep ascents. I passed through Rologmukle, Forstmukle and Cunnesdorf, from which point a rough and sandy ascent and a poor road lead to Rosenthal, the last German town before entering Austria.

Just outside the town are the German and Bohemian customs, a short distance apart. It was 8 p. m. when I reached Rosenthal. I had no German money, only American Express money orders, and not caring to sleep in the open I persuaded a farmer to let me sleep in his barn. I had no trouble with the German or Bohemian customs, but when I reached the Austrian official he wanted to see my triptyque. I assumed surprise, and went on to explain that motorcyclists did not require them, they being for automobilists only. He took my word for it, and I soon had a pass from him and the seal of the customs office on the motorcycle.

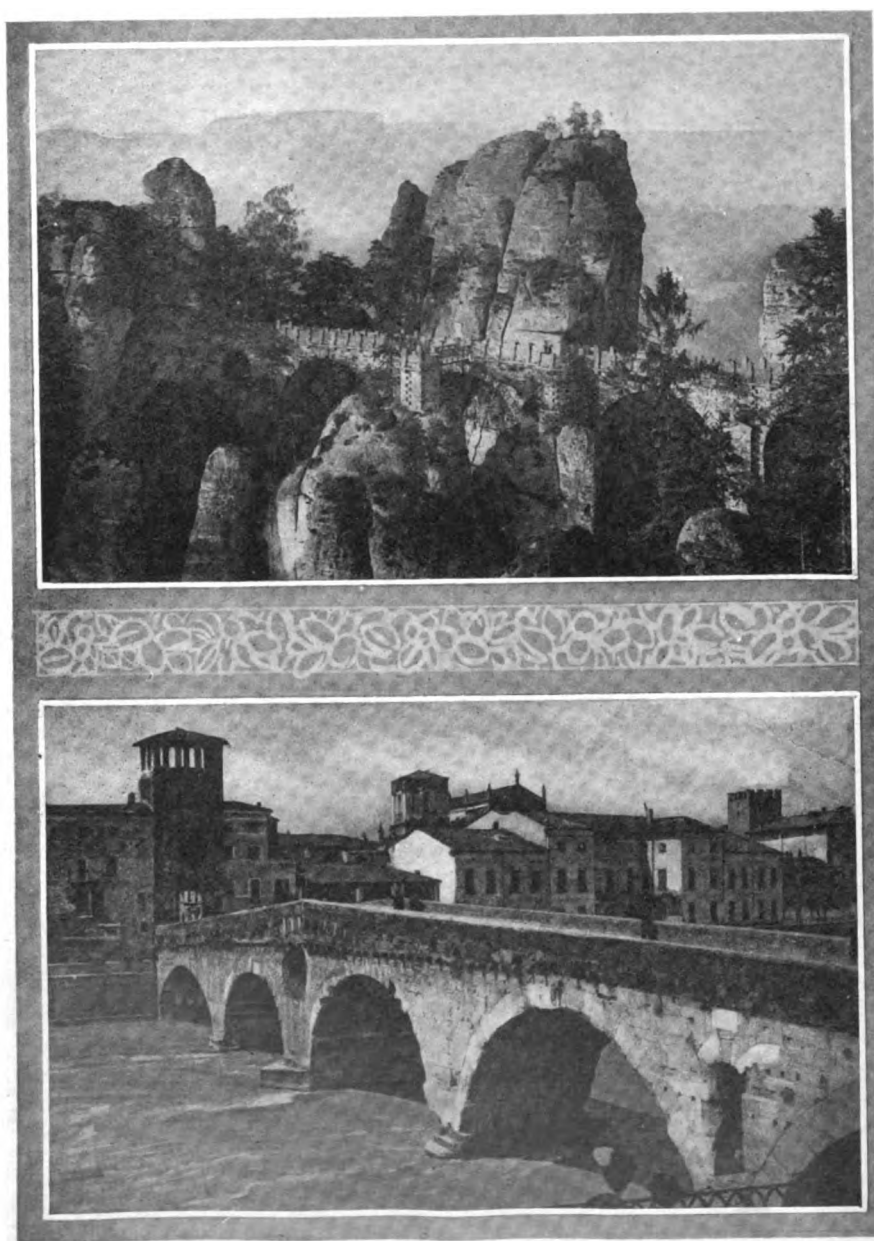
Along the Picturesque Elbe.

After paying seventy-one cents for a gallon of gasoline, I again set out and found good roads leading through a pine forest to Bodenbach, on the Elbe. Bodenbach is opposite the famous castle of Teschen. The road then follows the Elbe to Aussig, and is very poor. At Aussig I paid sixty cents for gasoline, and on the next day it cost me seventy cents, this being the highest price I paid while in Austria. The road continues in the picturesque valley of the Elbe to Teplitz. Through Brux, Kominatau, Kosterle and Carlsbox the road is pretty well worn, but the scenery is good. Just outside Carlsbad I got a two-inch nail in one of my tires; this was the first external puncture of the trip, and I had traveled 1,214 miles. As I went to mount my machine after the repair I found it impossible to turn the handle of the spark control. With a wrench I tried to loosen it, and after a few minutes I broke one of the pins. There was nothing to do then but return to town, and I had to wait over till the next day.

The next morning I took the road to Pilsen, via Petschan, through the beautiful Tepglans. The road was very slippery, and I could not make more than 10 miles an hour. That afternoon I had to make a stop on account of rain, but it did not last long, and I was soon on my way again. I passed through Horazhowic, over good roads, and at 7:30 p. m. I stopped at a hotel just beyond Strakowic. The accommodations were the poorest I had struck so far. The next morning in Budweis I again paid sixty-one cents per gallon for gasoline. Another downpour of rain made it necessary to seek shelter, and when I was ready to remount I found that my rear tire was flat. This was caused by the same nail puncture I received the day before, so I decided to remove the tube and replace the old one I had taken off in Berlin. To Linz, on the Danube, the capital of upper Austria, the road was slippery but generally good.

From Linz I was able to travel at thirty and more miles an hour through Wels and Lambach, and along the beautiful Traun river to Grounden and Traunkirchen, on Traun See. This was an enjoyable jaunt.

(To be continued.)



Top Picture—The Bastelbrücke, Switzerland. Lower Picture—Ponte Della Pietra, in Verona, Italy.



SOME ROUGH-RIDING

New Yorker Found Plenty of Road Variety and a Few Thrills on Pleasure Trip Into Vermont.

FRED JUKSCHWERDT, of New York City, who recently made a trip from the metropolis to Hinsdale, Vt., writes of his experiences as follows:

"It was 2 p. m. when I got under way and a little after 8 o'clock I reached Newton, Conn., having traveled 79 miles. The roads in New York were in excellent condition, but in Connecticut they were rather rough. I reached Danbury at 5.30 p. m., where I had lunch, and at 6 o'clock I was again on my way. Newton was only eight miles away, but on account of a five-mile hilly stretch, which was also rocky in places, it took me over two hours to make it. I had to push my machine much of the way.

"The next morning I started at 8 o'clock and rode to Sandy Hook, Conn., where I bought some rope and a gallon of gasoline. I was soon traveling again and found good roads to Plainville, where I stopped for gasoline, and then continued on to Hartford. From Sandy Hook to Hartford is 33 miles and I reached the latter place before 11 a. m. I had dinner and was on the road again by a few minutes after eleven. I had fine riding and reached Springfield, Mass., at 5 p. m. After eating a little supper I left for Greenfield over good roads and reached there by 8 o'clock. It was dark by this time and after lighting my lamp I set out for Brattleboro. The road was very bad and at one place where it was being repaired I had to walk about a mile. I reached Brattleboro at 9 p. m. and shortly after 10 o'clock I arrived in Hinsdale. I used but three and a half gallons of gasoline and two quarts of oil for the trip."

WITH BALTIMORE RIDERS.

BALTIMORE, Md.—The scheduled run of the Maryland M. C. to Harpers Ferry, W. Va., on Sunday, September 22, was called off by Captain Staniford, owing to the bad condition of the roads. A blind run was held, however, and the mudlarks had their inning. President Frank Boyd is laying plans for a minstrel show to be given by the members in the near future.

August Zimmerman, of this city, who is now a member of the Hendee force, left Springfield, Mass., early last Wednesday morning on his machine and arrived in this city about noon on Friday. The time he made was considered remarkable as he struck a heavy rain storm after leaving Springfield and it continued until he reached here.

The Chesapeake M. C. will hold its annual mask ball this month, arrangements for which will be made at the next business meeting.

CENTURY TANDEM TRIP.

B. S. AND H. B. EBERSOLE, of Sterling, Ill., recently made a run to Clinton, a distance of 108 miles, riding tandem on a 4 h. Flying Merkel, in five hours and fifty minutes. They left Sterling at 10 a. m. and arrived in Clinton at 7 p. m., after passing through Prophetstown, East Moline, Moline, Rock Island, Davenport, Bettendorf and Princeton to Clinton.

MEET POSTPONED.

THE racing program scheduled for the Tuileries track in Denver on September 15, was postponed owing to the fact that the funerals of Eddie Hasha and Johnnie Albright were held in the Colorado city on that date.

FRED and Hendon Vann, of Birmingham, Ala., recently made a trip to Washington, D. C., and return on their Indians.

Mrs. Helen White, of La Porte, Ind., appears in the photograph at the left with her Pope machine. Enclosed herewith is a reproduction of the medal presented to her by the Pope Mfg. Co.



MEDAL FOR MRS. WHITE.

MRS. HELEN WHITE, of La Porte, Ind., who distinguished herself on the recent F. A. M. run from Indianapolis to Columbus, by being the only woman motorcyclist to complete the trip on a single-passenger motorcycle without assistance, has been awarded a handsome silver medal by The Pope Manufacturing Company. In speaking of her experience on the trip, Mrs. White said: "The Pope brought me through without trouble of any kind on less than a quart of oil (175 miles), and 2½ gallons of gasoline. I made the trip with only one fall and that was caused by heavy dust. I tried the board track on the Pope and everyone was surprised at the speed I could get out of it."

A NEEDED REFORM.

COLUMBUS, Ohio, September 28.—Because of accidents lately in which motorcycles and automobiles ran into horse-drawn vehicles after dark, and in which a number of pedestrians were injured, the city council judiciary committee has voted for the passage of an ordinance requiring all vehicles, horse-drawn or otherwise, to carry lights front and back. To relieve the motor cops of part of their work the council provided an automobile for the use of a traffic officer, whose duty will be to arrest all offenders of the new law compelling vehicles to come to a stop on approaching street cars that are discharging passengers.

OHIO ROAD IMPROVEMENTS.

COLUMBUS, O., Sept. 23.—Bids for improvements amounting to almost \$150,000 are being advertised for by the State Highway Commissioner of Ohio, and contracts that will improve several miles of country roads throughout the State will be let as soon as possible.

EIGHT SHORT GRASS RACES.

EIGHT events, two amateur and six professional races, constituted the program at the State meet given by the Short Grass M. C. at Oakdale Park, Salina, Kan., Saturday, September 28.

400 MILES through NEW ENGLAND

D DWIGHT B. PANGBURN

FOR some time I had been looking forward to a vacation trip on my motorcycle and when Old Pal Amos called me by telephone one fine morning and announced that he was in a mood to start out with me that day, I jumped at his proposition. We overhauled our machines hurriedly and cleaned up a few business details during the morning and were ready for the road at 4 p. m. Accordingly we headed for Hartford. We could go via Middletown and up the Connecticut River or across country through Wallingford and Meriden. The lure of six miles of brand new State road just south of Hartford led us to choose the latter way, which in addition to the new road mentioned had very good roads all the rest of the way—or so we thought.

About a mile south of Wallingford we had to make a detour, as the main road was being asphalted. Here we had to climb a long hill of moderate grade on a narrow rutty road. We would have made it easily but for a road hog with a New York license (in New England almost all the road hogs seem to be in cars bearing New York licenses), who forced us into the ditch. There was no injury save to our feelings and after a half mile we reached the main road again and proceeded to Meriden.

On leaving Meriden we found the road builders had been at their old trick of dumping loose crushed stone on the road and leaving public spirit to roll it down. This lasted for two miles; then we struck good roads again and soon reached the above mentioned new State road, the Berlin turnpike. For several miles this road runs straight, over a succession of hills, resembling a gigantic switchback. It had been recently oiled and not sanded but we easily made up the time lost further back, and pulled into Hartford, 37 miles, at 5:45, a little ahead of schedule, which we had set at 20 miles per hour.

Into the "Slough of Despond"

We did not stop in Hartford but pushed for Springfield. In the July 11, 1912, issue of *MOTORCYCLE ILLUSTRATED* sandy roads were mentioned on the west side of the Connecticut River, so we took the east side, crossing the new bridge at Hartford. This gave us fine results till we reached Thompsonville, 6 miles south of Springfield. There had been heavy rains the night before in this section and the road, owing to hard usage, had become a pit of clay and mud. At length after a mile of riding with feet hanging out at the sides to save us from falling when our machines skidded, we saw ahead the last of the red lights that marked the new trolley construction and knew that good traveling lay before us. But between was a valley which contained the

Slough of Despond. Down into it we plunged—and stuck. Our machines were both singles, but I have ridden twins and a twin would have stuck too, I believe. Half the road was plain mud and half was mud interspersed with trolley ties. Simultaneously we hit the ties and began a succession of bumps and splashes. On the first tie my light went out; on the second Amos' followed its example.

Just after our lights went out and we were stranded in the middle of the slough a heavy touring car came over the crest of the hill and rushed down on us with open muffler, getting speed for the climb ahead. With one accord we seized our horns and blew with all our might, trying at the same time to get out of the road. About that time the driver saw us, set his brakes and slid to a standstill a couple of feet from us. After this narrow escape we lighted up once more and tried to start on. Again our lights bumped out. On the next try, however, we succeeded in pushing our machines up the hill and reached the macadam pavement through Longmeadow, arriving at Springfield at 7:45, having covered 64.8 miles, 30 minutes behind schedule.

The Run to Boston

On Saturday morning we went on at 8:35 and had a fine run over the excellent Massachusetts State roads to Worcester, which we reached at 11:15, 50 miles from the starting point in Springfield. We wished to get to Boston as soon as possible and so did not stop at Worcester. We had followed Blue Book routes so far and continued to do so, finding the roads from Worcester to Boston the best yet. We entered Boston past Norumbega Park on the asphalt speedway which is an extension of Commonwealth avenue, reaching the Common at 1:45, and completing a run of about 95 miles in 5 hours, 10 minutes. This was a little behind schedule and we found during the entire trip that it was not possible to average more than 16-18 miles per hour with any degree of satisfaction.

Meeting a Good Samaritan

We left Boston Common at 9:15 Sunday morning, intending to follow the Blue Book route to Plymouth. But we could not find Morton street, which we should have traversed; so we started in the general direction according to our own ideas. Just then luckily appeared one of the very few members of the fraternity that we had seen in Boston. He was mounted on a Pope and had what I took for a brass bicycle lock hanging on one of his saddle springs. Later I discovered it was the only license tag he was required to carry. Naturally our Connecticut number plates, 3 inches

wide by 10 inches long, and one on each end of the machine, caught his eye. He saw that we were strangers touring and probably mistaking our way—an easy thing to do in Boston—so he hailed us and asked where we were heading. Upon our saying Plymouth, he cheerfully informed us that we had picked the worst possible route, as to continue that way would mean riding over 7 or 8 miles of cobblestones. Then he volunteered to show us the right way, and went 5 miles out of his way to show us ours.

We went on down the south shore through the quaint towns of Quincy, Hingham, Nantasket, Cohasset and Scituate, to Marshfield. Here we turned off the State road and ran out to the little settlement, mostly of summer people, to Brant Rock. The principal thing of interest here, and the cause of this 5 mile side trip, is the National Electric Signalling Company's wireless station. We reached Brant Rock at noon, after a run of 47 miles, and took dinner at the Brant Rock House; if they always serve such food as they did to us. I advise motorcyclists to avoid them as a pestilence. We were dressed in khaki riding clothes, which in Boston had resulted in our being railroaded from the restaurant floor down to the cafe in one case at least, and we did not mind being put at a separate table in one corner of the dining room, out of sight of the better clad diners, but we did object to second class food as well.

More Sandy Roads

It was also at Brant Rock that we had our first and only tire trouble. I picked up a piece of iron wire of about No. 12 gauge and maybe three inches long. From Brant Rock we cut across country to the State road and down to Kingston. From here we started for Middleboro over the route listed in the Blue Book. The road is not very good anywhere over this stretch of 12 or 14 miles and in some places, aggregating perhaps 4 miles, it is very bad. In these spots it consists merely of a couple of ruts 6 to 12 inches deep wandering like lost souls in a devious course over a sea of sand. To meet or catch up with any other traffic in those spots is fatal. It means you have to shut off power and run into the ditch, and then push your machine to the end of that particularly bad stretch, for it is next to impossible to start from rest and get speed enough to be able to stay in your rut.

We wished to make Rhode Island that night, so we decided to cut across country to Fall River, instead of going around the regular route, by way of Taunton. I would not advise any one to try this. The older Blue Books give a route through here but the 1912 one

leaves it out altogether. Although the way is perhaps 9 miles shorter, I do not think any time is saved by going that way for the roads for the first half of the way are execrable. We arrived in Fall River at 6:05 p. m., having taken 65 minutes for the 16 miles from Middleboro.

Pleasant Run to Newport.

Fall River is primarily a manufacturing city, and every one knows that where drays and trucks are the only vehicles, cobblestones are the usual pavement. Fall River is no exception to this rule. After passing several stretches where the road was being fixed we arrived at a bridge and lighted up just after crossing it. We went on for about 5 miles and put up for the night at a farmhouse. We rolled our machines into the barn at 7:15 p. m., having covered 101.8 miles during the day. The next morning, Monday, we left at 8:30 and ran down to Newport. The 10:00 o'clock ferry for Jamestown and Saundertown was three minutes late in starting and we got on board at 10:02, thus missing by one minute, a one hour wait.

The ferry took us to Conanicut Island. There is a half-mile run across the island and another ferry to Saundertown (20c. each ferry), from which place a good road leads to Narragansett Pier. We arrived at the pier at 11:00 and then headed for Westerly. The trip from Narragansett Pier to Westerly was very unpleasant. The road was once macadam but it is worn out and full of holes. Eighteen miles of this took us to Westerly, where we stopped for refreshments, knowing that we had a bad section before us for 16 miles into New London.

The road to Stonington, once the richest city per capita in the United States, is the same as that to Westerly, and then it turns to sand. The road is not only sandy but there are numerous steep hills and bad curves.

An Emergency Pedal Repair.

We reached Groton at 3:32, just in time to miss the 3:30 ferry for New London—would that ferries were always as nearly on time as that. It had taken us an hour and a half to ride 16 miles from Westerly, and we were glad of 15 minutes' rest. We were sure that the road west from New London would be good, and after the first two miles it was. This two-mile stretch was sandy with projecting boulders here and there. One of these projected so far as to strike Amos' pedal and snap it off. We picked it up and proceeded on our way. At the first country blacksmith shop we stopped and Amos got a ¼-inch bolt about 4 inches long, and two nuts. He put the threaded end of the bolt through the hole in the pedal crank, with one nut on the inside and one on the outside. When the nuts were tightened up he had an improvised pedal which did very well.

After this little delay we went on towards the Connecticut River, the roads getting better. The new Saybrook-Lyme bridge is a toll bridge and we paid 15 cents toll. The toll-taker cautioned us to keep our receipts, as ten of these entitle one to a free passage. It was then 5:30, but the roads were good all the way to New Haven, and we decided to try to make 35 or more miles by daylight. We did not quite succeed, as the main road is also the main street of all the little towns along the shore, but we reached home at 7 p. m., having covered just 392.6 miles in all, and 128 miles for that day.



ANOTHER TIME-SAVER.

G. R. EWALT, of Abilene, Kan., is among the riders who are helping to prove the commercial as well as the purely social advantages of the motorcycle. Mr. Ewalt is employed by the United Telephone Company at Abilene and his official trips are usually made on his motor two-wheeler. He reports a material saving in time and general expense since purchasing his Emblem mount.

NEW ENGLANDERS ON TOUR.

WILLIAM H. STEBBINS, of the firm of Stebbins & Geynet, Eastern Connecticut agents for the Flying Merkel, accompanied by Charles Perry, Jr., and Peter Disjardins, all mounted on 6 h. p. Merkels have just completed a journey from their home town, Norwich, Conn., to the Merkel factory at Middletown. They left Norwich on Sunday, September 22, accompanied by a party of local enthusiasts who rode with them as far as Hartford. Striking out from Hartford, they went by way of Springfield and Pittsfield into Albany, making the trip through the Berkshires without mishaps of any kind.

NEW REGISTRATION RULE.

A CHANGE in the method of registration of motorcycles is to be made by the automobile division of the State Highway Department of Pennsylvania for 1913. Heretofore motorcycles have been registered on blanks similar to those provided for automobiles, but next year's licenses must be obtained on a special blank. The registration of motorcycles this year to date is over 7,100, against 4,826 last year. Each registration costs \$2.

RACES PLEASE BIG CROWD.

COLUMBUS, Ohio, September 27.—The motorcycle races held at the Delaware County Fair, Powel, Ohio, were witnessed by a large and enthusiastic crowd. The half-mile track is new and well banked. Competition was keen and no serious accidents occurred. A. A. Case, of Ohio State University, was chief promoter of the races and Mr. Gorrrell served as official referee. Summaries: Five-mile novice; Converse (Harley-Davidson), first; Dressel (Indian), second. Time, 6:25.

Three-mile stock; Bascom (Thor), first; Hall (Thor), second. Time, 4:7.5.

Five-mile open; Bascom (Thor), first; Dressel (Indian), second; Wells (Merkel), third. Time, 6:24¼.

Fifteen miles, open; Evans (Indian), first; Yates (Excelsior), second. Time, 18.38.

Bascom (Thor), threw a tire in last lap.

OHIOANS STILL HOPING

Good Roads Boosters of Buckeye State Will Ask for Direct Tax to Raise Big Improvement Fund.

COLUMBUS, O., Sept. 23.—Defeat of the good roads amendment in the recent constitutional amendment election will not prevent a good roads contest in the next General Assembly of this State. Officials of the Good Roads Federation declare that the Assembly will be asked to make a direct tax levy for road building. This will be the alternative to the bond issue now impossible under the present constitution of Ohio.

There are many who believe that the direct levy for roads will stand a better chance with the Legislature than a bond issue would have, had the amendment been ratified by the people. The good roads supporters say the fact that the amendment lost by a margin of only two thousand votes shows that the sentiment for improved roads is strong and that the Assembly cannot fail to take cognizance of it.

The precise plan of the Ohio Good Roads Federation is to ask the Assembly to make a direct tax levy for good roads of one-half mill. It is estimated that this would mean a revenue of \$3,000,000 annually, and would thus involve an appropriation of approximately \$6,000,000 by the Assembly for the next two years.

TWO GLOBE-GIRDLERS.

J. S. CLANCY and Joseph Storey, of New York City, sailed a few days ago for London, Eng., to begin a tour of the world on their Henderson machines. Mr. Clancy is a writer on the staff of *System*, and Mr. Storey is known through his writings in connection with moving pictures. The object of the round-the-world tour will be to obtain material for a book of travel and also to lay out a globe-girdling route. The prospective volume will be illustrated by photographs taken by the authors and in addition to being an entertaining travel book it will serve as a motorcycle "Blue Book."

Messrs. Clancy and Storey will go from London into France and then take up their course through Germany, Switzerland, Austria, Turkey, Egypt, India, Siam, China and Japan. They will then take steamer across the Pacific and ride from San Francisco to New York to complete their trip. The travelers will carry all their luggage on their machines. From time to time they will write of their experiences along the route and these articles will appear in *MOTORCYCLE ILLUSTRATED*.

PITTSBURGH MEET.

RACE followers were so enthused over the last motorcycle race meet given by the Pittsburgh (Pa.) *Press* that it has been decided to hold another similar event. The *Press* has arranged for five events to take place on the Schenley Oval on October 5.

A UNIVERSITY CLUB.

COLUMBUS, O., Sept. 24.—Following the opening of college last week, the Ohio State University Motorcycle Club is planning an organization meeting to be held at an early date. The club had about 40 members last year and the outlook is bright for a larger membership this year.

MANUFACTURERS

ADDITIONS TO MIAMI STAFF.

THAT the Miami Cycle & Manufacturing Co. is leaving no stone unturned to complete a perfect organization was further made evident this week when additional appointments were made to the factory and office forces. One of the most important announcements was to the effect that F. C. Kapp, formerly of the Flanders staff, has been secured to assume full charge of the automatic machinery division of the big plant at Middletown. Another appointment was that of S. G. Prest to the position of chief inspector. Mr. Prest formerly held a similar position with the General Motors Co. L. S. Taylor, for several years with the Emblem Manufacturing Co., and well known in racing circles, also has joined the Miami forces, and will be associated with Chief Engineer Joseph Merkel, in the engineering department.

C. A. Carroll, until now with the sales and advertising department of the Elyea-Austell Co., of Atlanta, Ga., has been appointed assistant advertising manager, and will assist Messrs. Ash and Valiant in the sales and advertising departments. He entered upon his new duties this week.

NEW WILLARD BATTERY.

REALIZING the growing demand for electric headlights for motorcycles, the Willard Storage Battery Company has developed a new type of LBA battery, particularly suitable for this service. This battery is made to be used in connection with 2-volt lamps and is capable of delivering a light far superior to the acetylene headlights usually carried. It will run the lamp for from 30 to 35 hours continuously before recharging.

The battery embodies all the features of the LBA battery which has made it a success in automobile lighting; but it has been constructed especially rugged and acid-tight to stand the severe service on a motorcycle. The battery weighs only eight pounds and can be attached in any convenient place on the frame of the motorcycle.

CANADIAN PATENT ISSUED.

CANADIAN patent rights on its Simplex spring tandem attachment have been obtained by the Angsten-Koch Company, of Chicago.

THE Graton & Knight Mfg. Company's Canadian distributors are the Canada Cycle & Motor Company, Ltd., with offices in West Toronto, Winnipeg and Vancouver.

NEW SPEEDOMETER READY

Corbin-Brown Instrument, Produced by Well-Known Brake Makers, Is the Latest Arrival.

THE Corbin Screw Corporation Division of the American Hardware Corporation, known to the entire trade as the manufacturer of the famous Corbin coaster brake, has entered the speedometer field with a new instru-



ment to be marketed under the name of the "Corbin-Brown." This speedometer is an adaptation of the "Corbin-Brown" automobile speedometer which has become generally known as the "speedometer of permanent accuracy."

The Corbin-Brown motorcycle speedometer is built on the centrifugal principle, and is therefore unaffected by temperature changes. It is claimed that it is just as accurate during the zero of Christmas as during the torridity of July. Compound governors make it doubly sensible to the speed of the wheel. The mechanism is extremely simple and the few parts are big and strong. The Corbin-Brown is sold under a one year's guarantee, which not only covers the speedometer as a whole, but its parts as well. It is listed at the extremely low price of \$15.

The Corbin Screw Corporation Division is now prepared to furnish special brackets for the Indian, Harley-Davidson, Excelsior, Pope and Merkel motorcycles. Brackets for other makes will be ready shortly.

NEW ERO QUARTERS.

ANNOUNCEMENT is made that the Ero Manufacturing Co., formerly located at 914 West Jackson Boulevard, Chicago, has moved to more spacious quarters in the Halton building, 408-418 West Indiana street. The company has added a number of attractive new specialties to its line and preparations are being made for a heavy output with the opening of the 1913 season.

ASUNDAY run to Chandler, Ariz., was recently conducted by the Phoenix M. C., under the direction of Captain J. Young.

PHARIS COMPANY REORGANIZES.

COLUMBUS, Ohio, September 28.—The Pharis Tire and Rubber Co., recently incorporated, held a reorganization meeting this week at which A. R. Lindorf was elected president, R. W. Pharis, Secretary-Treasurer, and Carl Pharis, General Manager. The company decided to reopen the factory of the Newark Tire and Rubber Co., now owned by them after equipping it with additional machinery. The output of the Newark factory is about 50 motorcycles and automobile tires daily.

NEW R-S. DISTRIBUTORS.

EUGENE COUGHLIN, manager of the Riverside Motorcycle Garage, 533 West One Hundred and Tenth street, New York, has been appointed distributing agent for New York (Manhattan and Bronx boroughs) and Westchester County for the Reading-Standard for the coming season. Coughlin has been connected with the industry for a number of years, and has participated in practically all the star events in the Middle States since 1909. Indications of a boom season for the R-S are already discernible, nor are like symptoms wanting in the Eagle line, for which the Riverside Garage is also agent. An aggressive sales campaign has already been started.

AN ALL-WINTER SCHEDULE.

ALL of the United States Tire Company's factories will be operated during the coming winter on full summer schedule. This means that they will be run night and day, three shifts of workmen being employed. The decision to continue this plan, begun last year, was reached at a conference in New York last week between General Manager J. M. Gilbert and the company's factory managers, W. McMahon, of the Detroit plant; J. M. Patterson, of the Providence plant; Harlow W. Waite, of the Indianapolis plant, and C. B. Whittelsey, of the Hartford plant.

MATTHEWS HANDLES SALES.

"SHORTY" MATTHEWS, well known as a speedster of the Thor camp, has assumed charge of the Aurora Automatic Machinery Company's retail sales department in Chicago, the vacancy having been left through the resignation of Mr. Freeman. "Shorty" is well liked in trade and racing circles and is counted upon to whoop things up in his new position.

AN EMBLEM STOLEN.

ARED twin Emblem, engine No. 7335, was stolen from the freight house at Landisville, N. J., recently, and dealers and repairmen are requested to be on the lookout for it.

MOTORCYCLISTS of Gulfport, Miss., and suburban districts recently held a meeting to lay plans for a motorcycle club and expect to effect an organization in the near future.



**Two Views of the New Dayton Twin,
Manufactured by the Davis Sewing
Machine Company, of Dayton, Ohio**

PREVENTS TIRE-CREEPING.

OF interest to motorcyclists as well as automobilists is the announcement that Clarence E. Falor, of Akron, Ohio, assignor to the Goodyear Tire & Rubber Company, has been granted a patent for a device to prevent creeping of tires upon wheel rims. It comprises a tubular member of greater rigidity than the inflating tube, positioned around said tube. The intermediate portion of said member where it extends in the wheel rim is exteriorly threaded to receive a clamping nut for connecting it to the rim, one end of said member being provided with a disc shaped lateral flange arranged on the wall of the tire, the opposite end being so designed as to be collapsed against said inflating tube when a valve casing is positioned therein for holding the latter against displacement.

INCREASED TERRITORY.

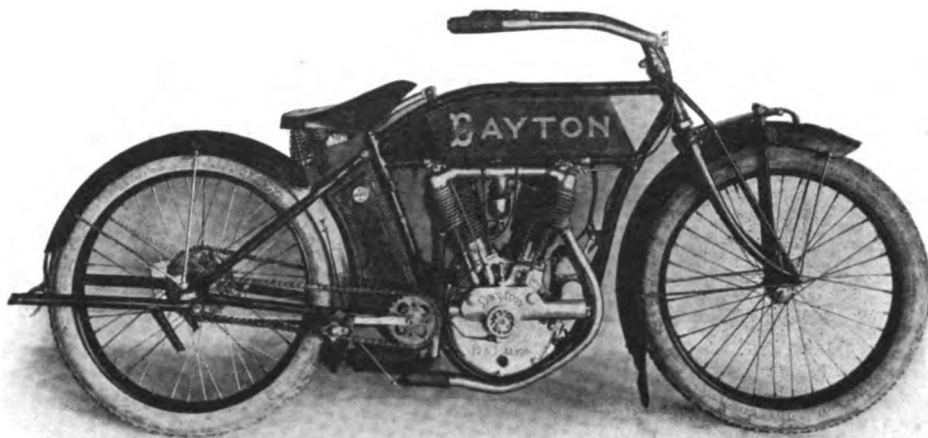
COLUMBUS, Ohio.—L. P. Birkenbach, located at 17 North Fourth street, Columbus, has closed a contract as central Ohio distributor for the Thor, in 16 counties. He will appoint a large number of sub-agents. The territory covered by the concern is considerably larger than last year.

MERKEL DISTRIBUTORS.

AN announcement of considerable interest to the motorcycle trade at large, and especially to the Southern field, was made this week by the Miami Cycle & Manufacturing Co., of Middletown, O., to the effect that the Elyea-Austell Co., of Atlanta, Ga., will be the Southern distributors of Flying Merkel motorcycles. The territory included in the new agreement will be the States of North and South Carolina, Georgia, Florida, Alabama, Mississippi, and the eastern part of Tennessee.

NEW INDIANAPOLIS FIRM.

DOUGLAS & TALBOT, of East Ohio street, Indianapolis, are going into the motorcycle field next spring with the Triumph agency. Mr. Douglas was formerly with Gus Habich, the Excelsior agent.



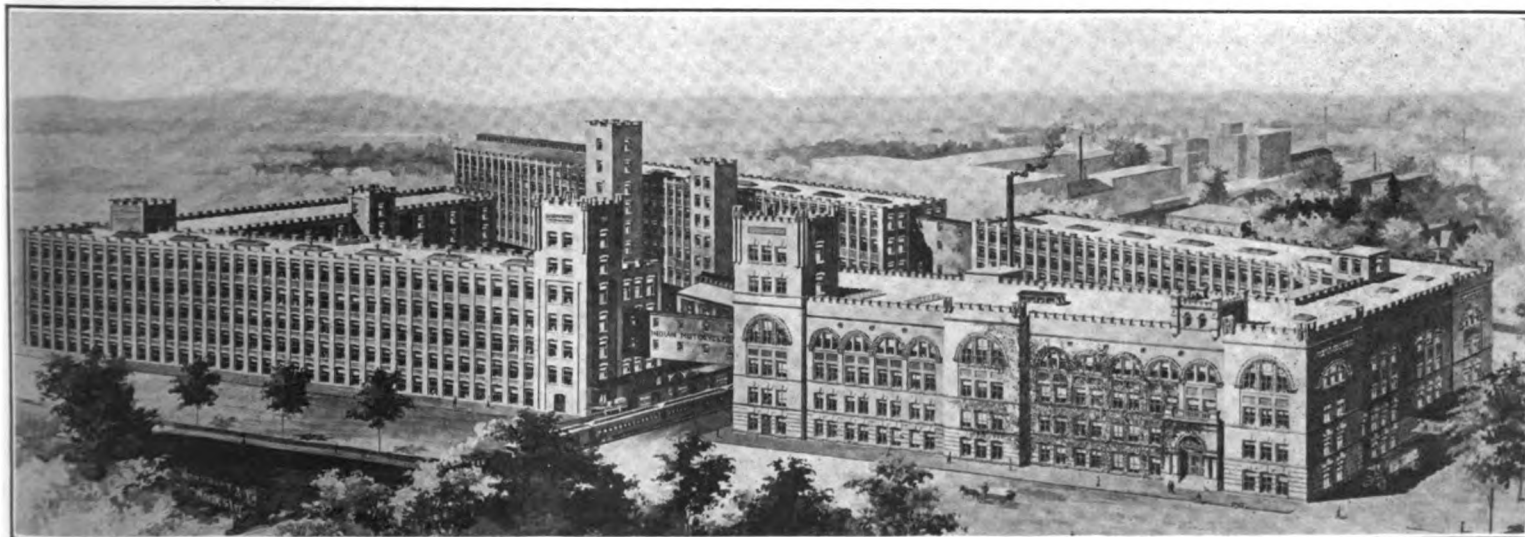
NEW PRESTO INTERESTS.

ONE half the capital stock of the Esterline Company, of Lafayette, Ind., which totals \$250,000, was purchased recently by Carl Fisher and J. G. Allison, owners of the Presto-O-Lite Company, of Indianapolis, and as a result the plant will soon be moved to the home of the Presto products. Despite the removal of the Esterline headquarters to Indianapolis, it is announced that there will be no change in the management of the company. The company manufactures the Berdon system of electric

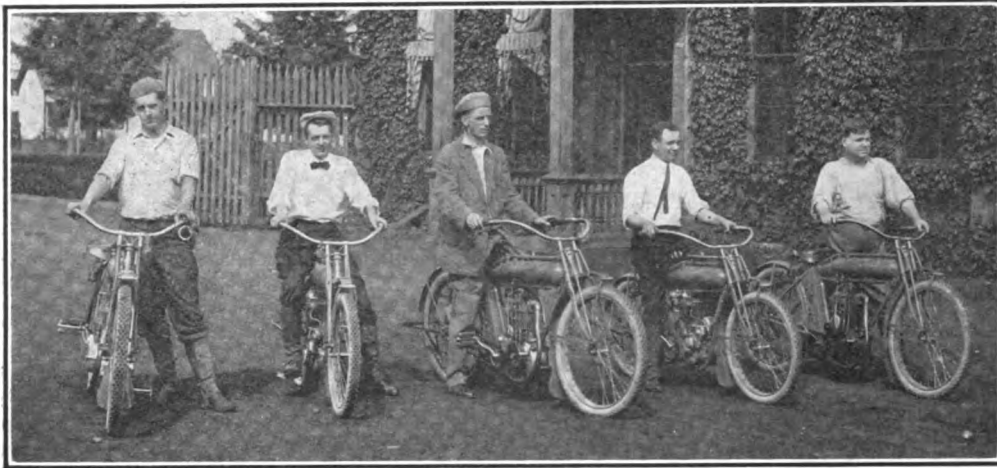
lighting and has heavy orders booked for its product. It is stated that the firm has also about perfected a combined electric lighting and starting system for automobiles.

BALTIMORE FIRM GROWING.

THE Chase Motor Company, of Baltimore, Md., which operates the only exclusive motorcycle garage in Baltimore, has outgrown its present quarters and is completing arrangements to erect a new garage, with rooms above, the latter to be occupied by the Harley-Davidson Motorcycle Club.



A Striking View of the Indian Plant at Springfield, Mass., Embodying the Recent Extensions.



Five New Pope Salesmen About to Start Out for Practical Road Work. From Left to Right: H. C. Lyman, T. B. Hallburg, T. R. Carpenter, F. L. Hamer and W. B. King, Jr.

INDIAN FORCE AT HEAP BIG POW-WOW

Twelve Hundred Hendee Employees and Two Hundred Guests Enjoy Record-Breaking Outing at the Company's Expense.

FOR excellent reasons, Saturday, September 21, will long be remembered by the 1,200 braves employed by The Hendee Manufacturing Company. On that day the Indians, accompanied by 200 guests, had a grand "Pow-wow" at Riverside Park, on the outskirts of Springfield. Every individual in the factory from the Big Chief, George M. Hendee, down to the shipping room employees turned out for the affair, which was the biggest ever given by a Springfield manufacturing concern.

About 9 o'clock in the morning the Indians assembled at the wigwam and gave their favorite war-whoop. All wore white caps and carried bamboo canes, from which floated Indian pennants, and badges were pinned on with the familiar Indian buttons. Then the twenty-four departments of the factory, forming sixteen divisions, paraded to Court Square, giving many cheers for Big Chief Hendee on the way. The Knox automobile band played industriously and a platoon of police headed the procession. The fair members of the office force rode in automobiles. After marching around Court Square and up Main street to Harrison avenue, the crowd boarded fifteen special cars which were in waiting. On arrival at the park a photograph, with the girls in the center, was taken.

In order that the Indians might not become impatient for the "heap big" feast, sandwiches and firewater were served at intervals. Then the sports were run off, the feature being a tug of war. Sixteen teams entered and several pulled dead heats. After putting forth every ounce of strength they possessed team No. 1, from the Machine Department, nosed a victory from team No. 11, of the Assembling Department. Other events included a 75-yard dash, run in ten heats of five men each; a sack race, five heats of eleven men each; running broad jump, bait casting for accuracy, half-mile race and a three-legged race. Each of the events afforded rare sport, and much rivalry was manifested among the employees of the various departments. Valuable prizes were awarded for each event. R. W. Ellingham was referee of the field events, F. J. Weschler for track events and N. D. Hulett acted as clerk of the course.

After the prizes were awarded all prepared for the big feast. This was held in an enclosure in the park, and soon all the entrances were crowded. When word that the bake was open had reached the outside all the Indians marched to their places at the table, the entire body being seated at one time. It was the largest clam bake ever attempted in Western New England. In order to accommodate the 1,400 sharpened appetites the management of the park had engaged 125 waiters and 25 captains to look after the service. The work of preparing the bakes had been going on since Friday night. There were three different bakes, each being located to the best advantage to serve the crowd.

An idea of Indian appetite may be gained from the eatables necessary to satisfy the bunch. The list is as follows: 100 bushels of clams, 5 barrels of oysters, 1,500 lobsters, 700 chickens, 2,500 ears of corn and 500 loaves of bread; the quantity of brown bottled goods was not given. When the party had been thoroughly satisfied some of the braves journeyed to their homes; while others remained at the park to take in the various amusements.

The foremen of the factory and several members of the office force made up the committees which had charge of the "Pow-wow." Besides feasting them to the limit, The Hendee Company gave all its employees their pay for the day.

AGENTS ARE BUSY

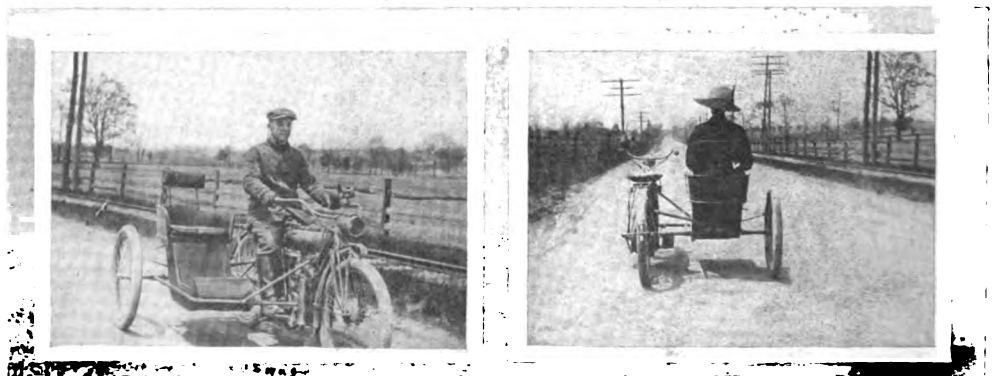
Demand for American Goods Is Growing in Canada, and General Outlook Is Bright.

TORONTO, Can.—The wheels of the Toronto motorcycle trade are still merrily humming in spite of the lateness of "the season." Present indications are that the unprecedented activity will be maintained right up until midwinter, when thoughts will naturally turn to 1913 doings. The turning point will probably be the big exclusive motorcycle and bicycle show which is planned for Toronto next February, arrangements for which are already being consummated. An experienced manager has been engaged for the exhibition, and a committee of the Canadian Motorcyclists' Association is working on the plans.

Wide support has been promised for the event, as the local dealers who control large territories for their commodities are behind the movement in order to have an opportunity to introduce their 1913 products to out-of-town dealers and sub-agents. It is also hoped to induce those manufacturers who are not yet represented in the Dominion to take advantage of the show to introduce themselves to the trade. There is room for everybody in the growing country. It may develop that the motorcycle committee will extend the scope of the show to include motorboats and sportsmen's goods, but in any event motorcycles will form the main feature of the exhibition.

At present Toronto has more than a score of motorcycle agents, but this number is being added to continuously. Three-quarters of these are for American mounts. Several American producers have been looking over the local field lately with the idea of establishing branch factories in the vicinity. It has become known that a certain motorcycle maker, whose name is necessarily withheld, has approached a high official of the Canadian Motorcyclists' Association with an offer to assume the Canadian sales management for the make which is to be assembled on Canadian soil. The second largest bicycle factory in Toronto has also been negotiating with the Reading Standard Co. to handle the R. S. in Ontario next season.

Other facts are as follows: The Canada Cycle & Motor Co., of West Toronto, has just been appointed the Canadian distributors for Spartan belts, made by the Graton & Knight Co., of Worcester, Mass. A. Shuttleworth, of Toronto, has secured the Ontario



Side-Car Built by Edwin H. Bitin, of Harrisburg, Pa.

selling privileges for the fast P. E. M., while W. Porter recently opened up a branch in Toronto of H. Collier & Sons, of London, England, makers of the Matchless motorcycle. Porter expects a turnover of fifty machines in his first year.

H. N. Kirk, secretary of the Excelsior Motor Manufacturing & Supply Co., of Chicago, recently visited Toronto, when he closed with Percy A. McBride, the local Excelsior salesman, for 500 machines for 1913. McBride is disposing of his sporting goods business and will concentrate his attention on the motorcycle and bicycle trade in future.

W. Sabin, representing the Calthorpe Co., of England, is at present on a tour of Canada for the purpose of placing agencies for that machine. Other British firms are also again making a bid for Canadian dollars. In recent trials in the old country, several makers tried out "Colonial" models, which are intended for the Dominion trade. The Colliers are featuring the fact that they are now building a motorcycle with a clearance of $5\frac{1}{2}$ inches under the engine for Canadian roads.

GRYNDYN FOR VALVES.

STEWART & COMPANY, of Broadway and Cortlandt street, New York City, have brought out a ready-for-use valve grinding compound which is the result of a number of years of research. This compound, known as "Gryndyn," is a special mixture of carborundum in suspension and is used directly and continuously; that is, the grinding is begun and finished by Gryndyn only and not by two or more grades of emery or the like. That this is of inestimable value to the motorcyclist in the saving of time in this usually tedious operation, and in not having to take great care that the wrong size of abrasive or grinding powder is not used, should be very evident. The size of the box is such that it is easily recognized by touch and fits practically anywhere on the machine or in the pockets of the rider. The cutting action is very fast and only the worst cases of pitting need be refaced in a lathe, or facer, an advantage not to be had in the use of emery without great waste of time and chances of spoiling the valve-face or seat.

The directions for the use of this compound are generally comprehensive and valuable. In using, a generous coating of the compound is to be put on the valve face, and the valve turned to and fro on its seat in the usual manner. Only three to four pounds pressure on the screw driver or grinding implement is necessary, and a light spring should be under the valve to lift it when a change of grinding position is necessary. After a short time the valve should be lifted clear of the seat and the face cleansed with kerosene and examined, as should also be done to the seat. Leaving a little kerosene on the valve and applying the compound again, grinding is continued as before. This operation is to be proceeded with until all the pits are removed, or until a good surface is produced. The dull finish is recommended as giving the best results and this is obtained at this stage of the operations.

To get a bright or polished finish, having the dull finish, remove the valve and clean its face, leaving the seat as it is. Replace valve and give twenty to thirty turns. Remove and clean valve as before but not the seat. Repeat the operation until the desired finish is had; then wipe both valve and seat.

If a little wood alcohol is used on the cylinder walls, any small particles of carbon will be removed and will not lodge under the valve

face and cause poor seating. Valves with bent stems should be placed in a lathe, straightened and refaced before grinding is attempted. Before commencing grinding operations the fit of the valve in its guide should be seen to be proper, when the formation of the seat and face to correspond can be commenced.

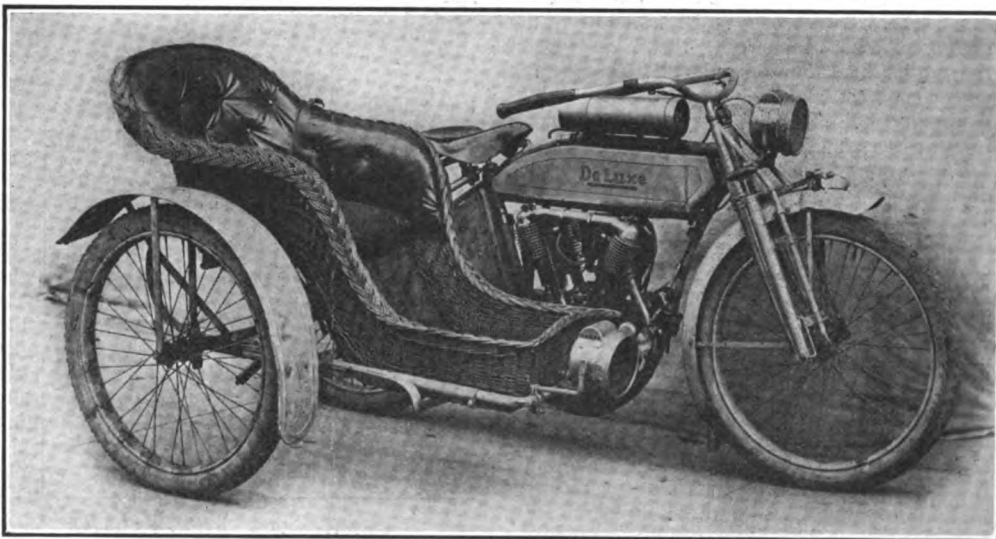
For use in valve grinding, the makers suggest a heavy screw-driver, in default of an excellent little tool, the Owen valve grinder, which is superior to the former. This grinder weighs $3\frac{1}{4}$ pounds and has a channeled handle and circular weighted portion immediately above the blade-shank. It is made of the finest steel and is practically unbreakable under even extraordinary usage. In operation, the end is put in the slot of the valve head and the tool rotated between the hands, its weight giving the proper pressure for grinding. The channels allow of an easy rotation without tiring the operator and ensure this rotation. It is priced at \$2, including a small supplementary spring for lifting the valve, and will fit into any tool box or kit. The Gryndyn comes in screw-top tin boxes which cost 35 cents each.

FREIGHT HEARING CLOSED

Full Testimony Relative to Transportation Rates on Motorcycles Is Now in the Hands of a Commissioner.

CHICAGO, September 30.—Commissioner Prouty, who has been hearing testimony in this city relative to freight rates on motorcycles, completed his work last week and has taken the matter under advisement. His decision will probably be announced at an early date from Washington. The investigation has been conducted by the Interstate Commerce Commission at the instigation of the Motorcycle Manufacturers' Association, this body claiming that there has been a tendency to discriminate against the motor-driven two-wheelers. The rate on bicycles is quite satisfactory, and the manufacturers seek to have this schedule applied to motorcycles also.

The rate for bicycles is one and a half times the first class rate, while the present rate on motorcycles is two and a half times the first class rate. In defending their stand railroad officials assert that motorcycles are more difficult to handle.



DE LUXE SIDECAR.

IN the accompanying photograph is shown the new De Luxe sidecar which is being marketed by the Excelsior Cycle Company, of 166 North Sangamon street, Chicago. The attachment is produced in two styles, both featuring the company's special spring shock-absorbing frame. The De Luxe sidecar lists at \$75.

ON MIDDLE WESTERN TRIP.

CHARLES BROOKS, of the Twentieth Century Manufacturing Company's staff, has left for a two months' business trip in the Middle West and his first bulletins to the factory presage a record-breaking season for Twentieth Century products in this territory.

THE West Side store of the Lister Motorcycle Company in Cleveland, Ohio, has been closed for this season, and all business will be carried on at the main agency on Fifty-fifth street during the winter months.

THE Yale Cycle & Supply Company has closed out its entire stock of parts and accessories, leaving the motorcycle trade in Cleveland.

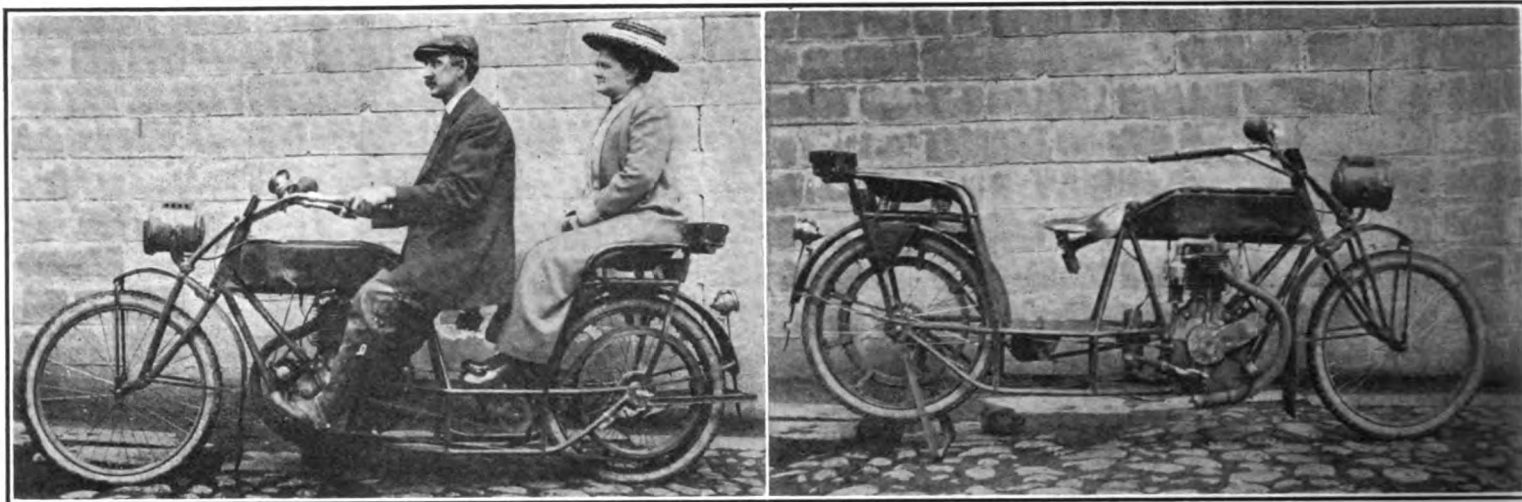
AFTER RACING HONORS.

THAT the Triumph Motorcycle Company, of Detroit, intends to take an active part in the racing game, was evidenced by the arrival at Toronto of Harry E. Brown and a Triumph racing mount from the factory for the Toronto Motorcycle Club's Ontario championship race-meet at the Exhibition half-mile track on Saturday, September 28. "Jup. Pluv." interfered with the arrangements, however, enforcing a postponement.

Bill Staudt, of the Reading-Standard factory, was on hand for the meet as was a machine from the Flanders factory at Pontiac, Mich.

SABO SOLD OUT.

JOHAN SABO, the South Side motorcycle man, of Cleveland, and sub-agent for the Indian, has disposed of the last of the fifty Indians under his 1912 contract with L. J. Mueller. This was Sabo's first year as a sub-agent. Sabo has patented an Indian motorcycle lock, which is unique in action, fastening the stand to the frame of the machine. He intends marketing the lock at 75c.; nearly two hundred have been sold in Cleveland.



NEW TANDEM MOUNT.

FROM Green's Pattern Shop, 220 Park street, New Haven, Conn., come the unusually interesting photographs reproduced above. They show a new machine which the company contemplates placing on the market at an early date. It will be noted that the outfit embodies some new ideas, and when the design has been refined and tested to the entire satisfaction of its inventors, it will undoubtedly find a ready market among seekers for two-passenger motorcycles.

The four-cycle motor used is of the Green design, with bore of 3 15/16 and stroke of 4 1/4. It carries a steel flywheel, 12 inches in diameter, and develops 7 horsepower. The carbureter is also of special design, and is fully covered by United States patents. It is stated that the machine, carrying two persons, will average 60 miles on a gallon of gasoline, with this carbureter fitted. The machine has a wheelbase of 74 inches and 28-inch wheels with 3-inch Nobby tread tires. From the center of the motor to the center of the rear wheel the distance is 44 1/4 inches. The front saddle is a Mesinger No. 4 and the rear seat follows the lines of those fitted on New Era machines. The outfit weighs 275 pounds complete, with the tanks carrying full supplies, 10 quarts of gasoline and 2 1/2 quarts of oil. Officials of the company are unable to state definitely when the machine will be ready for marketing, but it is intimated that the first lot will soon be under way.

ON HENDEE STAFF.

H. M. SEIBOLD, who has been connected with the C. E. Barr Motorcycle Company, of East Gay street, Columbus, Ohio, agent for the Indian, has taken a position with the Hendee company. After a course of instruction at the factory he will go on the road. J. Otto Tressemer, also connected with the Barr Motorcycle Company until recently, has taken a position in the repair department of the Hendee Manufacturing Company.

RECEIVER NAMED.

COLUMBUS, Ohio.—A. F. Rohmer has been named as receiver for the A. B. & B. M. Howell Co., 185 South High street, Columbus, former agents for several lines of motorcycles. The application was made by A. B. Howell, who asks for a dissolution of the partnership. The assets are given at \$10,000 and the liabilities at about \$5,000.

SHOW SPACE IN DEMAND

Many Applications Have Been Received from Prospective Exhibitors for Big Chicago Display.

THE Chicago Motorcycle Show, under the auspices of the M. M. A., will be the first national show of its kind ever held in this country, and, while bicycles will be included, the exhibition will be practically an exclusive motorcycle show. Application blanks for space have been mailed to all likely exhibitors, and applications are coming in at such a rapid rate that the show is assured of hitting the high-water mark.

All applications for space should be mailed to J. S. Vogel, 116 S. Michigan Avenue, who has been chosen to manage the exhibition by the M. M. A. Show Committee. The exhibition spaces will be rented at 90 cents per square foot. This includes all fixtures, light and other necessities. The general admission price will be 25 cents. The opening evening of the show will be for dealers particularly, and manufacturers will send out compli-

SPEAR ON THE ROAD.

DEALERS in New York State will be pleased to greet William R. Spear, representing the Reading-Standard Company, Inc., who is covering that territory on his twin mount. He started from Newark, N. J., on September 30, and will cover 2,500 miles of



Empire State roads before November 1. Spear says that 1913 prospects are the best ever, and he has just closed agencies for all of Greater New York and Westchester County and Eastern New Jersey.

mentary tickets to all dealers applying for them. It is expected that there will be present on the opening night more than a thousand dealers from all parts of the country.

The show will open to the public at 6 p. m. on Monday, February 3, on the second floor of the Manufacturers' Exhibition Building at 1319 Michigan Avenue. It will continue until 11 p. m. on February 8. The automobile show will open up about the same time, and there will be a huge electric sign across the street from the Coliseum entrance, calling attention to the motorcycle show, just about a block to the east.

NEW MERKEL AGENT.

L. H. SILSBY, of Cleveland, Ohio, who conducts a motorcycle repair shop at 5406 Detroit avenue, has been appointed agent for the Merkel in Cleveland and northern Ohio.

MANY MACHINES STOLEN.

THEFTS of motorcycles in Cleveland have become so common that the chief of police has issued weekly bulletins to all officers to be on the lookout for the stolen mounts. Riders are being stopped daily by officers, who examine their machines. Several machines have been recovered in this way, while a few have been found abandoned on country roads.

NEED NEW HEADQUARTERS.

A COMMITTEE appointed by President McConnell, of the Cleveland M. C., is on the lookout for new club-rooms. The club has been holding its meetings at the club-rooms at Luna Park, but since the closing of that amusement place other quarters are needed. A permanent location in the central part of the city will probably be obtained.

RIDERS GO TO ST. LOUIS.

AFTER the close of the Cleveland motorcycle drome, Gibson, Glenn, Carslake and Armstrong pulled stakes and left for St. Louis, where they are to perform on the boards at the new quarter-mile saucer under the same management as at the Cleveland track.

BIG COLUMBUS MEET.

COLUMBUS, Ohio.—Arrangements are being made by a number of motorcycle dealers and riders to give a race meet on the dirt track of the Columbus Driving Association on Sunday, October 13. It is proposed to have eight events in all, the feature being an hour race. There will be races for singles and twins and for professionals and amateurs under the new classification of the F. A. M.

COLE AT HIS BEST

Toronto Youngster on a White Thor Lowers Record for Exhibition Track in Recent Meet.

TORONTO, Can.—Harold Cole, the sensational Canadian racer, set a new record of 6:14 for five miles for the Exhibition track, Toronto, at a race meet held there on Satur-



Bill Staudt on His Reading Standard at Toronto Race Meet.

day, September 21. Cole piloted a white Thor. The oval was in the best condition it has ever been in, being as hard as concrete and carefully oiled, and if it had not been for a gale that was blowing, he would probably have covered the distance in ten seconds less. Cole also won a ten-mile race and was opposed on both occasions by Bill Staudt, of the Reading Standard factory. In the long event, Cole only won by a fraction of a second, in the fast time of 12:37½, while Staudt led for the greater part of the time in the five-mile clash.

Bob Scott, the coming Indian rider of Toronto, took the five-mile race for amateurs in 6:45 from F. Miles, Indian, whom he only beat by a machine length. This was Scott's seventeenth victory this season. About five thousand persons witnessed the races, which were of the sort that causes heart palpitation.

ABERDEEN ROAD RACE.

A ROAD RACE, covering 119 miles, from Aberdeen, Wash., to Centralia, was recently pulled off under the auspices of the Aberdeen Motorcycle Club. Large crowds thronged the streets of the towns through which the racers passed. At some places they were able to make 60 miles an hour and the speeders furnished plenty of excitement from start to finish. Everett Lodbell (Indian) and Aubrey Archer (Excelsior) were the chief thrillers; Lodbell crossed the tape only 30 seconds ahead of Archer. R. E. Barnes (Indian) was third. Time, 3:13:30.

SHORT GRASS MEET.

A MOTORCYCLE race meet was held in Salina, Kan., under the auspices of the Short Grass Club on September 28. There were eight events, two for amateurs and six for professionals.

HOWARD L. COLE, of Jackson, Mich., spent his vacation touring from Jackson to Baltimore, Md., on his motorcycle.

THE BENNINGS SITUATION.

EDITOR MOTORCYCLE ILLUSTRATED:—Having noticed a letter in the September 19 issue of MOTORCYCLE ILLUSTRATED written by Mr. Frank Long, I wish to state that Mr. Long's ideas and statements in regard to Bennings racetrack, in Washington, D. C., and regarding the riders who participated in the races on Labor Day are erroneous and very much exaggerated, and I wish to say the following:

The track was in perfect condition on Labor Day, being well oiled, and the only spot of sand was on the upper turn, being only two inches deep instead of from "ten to fifteen inches deep," as he states.

The statement that "one man in particular who rode in the races gave his word in writing that he would stay with the other boys in any decision reached," is incorrect, as I have had a personal interview with every rider who raced on Labor Day and they state that they did not agree verbally or in writing to take any special stand.

The statement that the four riders who started were novices, using long handlebars and just off the streets, is also incorrect. Seven riders started in the 10- and 15-mile races and three of the machines were equipped with racing handlebars. Among the starters were Mr. Mangold, the best rider in the District of Columbia, who has been racing for the last five years; Mr. Marsh, who has been racing for the last three years, and Mr. Myer, who is out of the novice class and who has been racing over a year. The races were run off in a very satisfactory manner, the prizes for the first race being gold and silver medals; for the second race, a \$25 first prize and a \$15 second prize, and for the third race, a \$25 first prize and a \$15 second prize. If Dr. Thornley or one of his representatives should ever visit Washington and inspect Bennings I am sure he would think the same as I do.

GEORGE T. COCHRANE,
President, Washington Motorcycle Club.

TULLIS 100-MILE WINNER.

DAYTON, O.—More than five thousand enthusiastic fans attended the 100-mile race which was recently pulled off on the local fair grounds under the auspices of the Dayton Motorcycle Club. It was the first race of its kind in this vicinity.

The program opened with a five-mile race, which was won by Mumma (Indian); with Malloy (Thor), second, and Reichel (New Era), third. Dave Tullis, of Kenton, won the 100-mile open race in 2 hours and 18 minutes. Evans (Indian) was second and Bascom (Thor), third. Irvin Jacobs, who made the 100 miles without a stop, came in fourth. On August 4 Tullis was the winner of a 100-mile race at Fort Wayne on a mile dirt track, his time being 119 minutes.

RACES AT COUNTY FAIR.

FOUR motorcycle races were staged at the Westmoreland County Fair, Youngwood, Pa., September 12-13. About 10,000 people witnessed the events. Ten and 15-mile races were scheduled for the first day and both were won by George Roth, riding a 4 h. ported Indian. His time for the 10 miles was 13:18, and for the 15 miles 20:19½.

HARRY GOODE, a salesman for the Flanders, recently put his machine to a severe test by riding through the Platte Canyon, in Colorado.

A CROWN POINT SPEEDSTER.

IN a meet held at Crown Point, Ind., on September 15, Art Henderlong, mounting an Indian, lowered the track time from 1:16 to 1:07 for the mile. Steve Barzo, a Gary rider, in trying to hold Henderlong's pace drove his white Thor racing machine into the fence and broke his right leg in two places. Henderlong, who is the local star, has taken every race but one on the Crown Point track this season. In the 10-mile event at the recent meet Mike Hershberg, using Henderlong's racer, won in 12:07, with Ballard, Thor, second in 12:52. The Henderlong racer is not a special factory machine, but one which the boys have trimmed up for extra speed. It is explained that Henderlong's time of 1:07 was really for one mile and 900 feet as the track, which is rated at half a mile, is slightly oversize.

FREDERICKS DEFEATS BOYD.

DENVER, Col., September 22.—"Slivers" Boyd and Fredericks were hooked up in an interesting race here today over the 25-mile route. Fredericks took the lead for the first 10 miles, when he was displaced by Boyd for the next five miles. For the last 10 miles the riders were elbow to elbow, but Fredericks nosed out at the tape.

Jim Cox and Harry Swartz rode abreast in the five-mile event to within 100 feet of the tape, when Cox managed to gain a few inches which he carried over the line. The match race between Balke and Edward Swartz was a hummer. There was plenty of jockeying before Balke managed to shake his opponent in the seventh mile. Then he cut out and took a lead of a third of a lap. To close the program Balke attempted to lower the track record of 39½ for the mile, which he set two weeks ago, but was unsuccessful.

A FLANDERS DAY.

THE St. Augustine Machine Co., Flanders agent in St. Augustine, Fla., writes as follows concerning a recent race meet on the beach: "Flanders machines romped off with first, second and third places in the 5-mile event and took first and third places in the 10-mile race. In the 20-mile event we landed a second."

A PITTSBURGH MEET.

THE Pittsburgh Press will conduct another motorcycle race meet on Saturday, October 5, at Schenley Oval, Pittsburgh. The program will include five events. Schenley Oval is an excellent half-mile dirt track, banked somewhat at the corners.



C. R. Burbanks, of Dover, N. H.

THREE CLEAN SCORES IN TORONTO RUN

Heavy Rain Crimped the Schedule for Some Over 191-Mile Course, but Seventeen Riders Finished Out of Twenty-three Starters.

TORONTO, Can.—The annual reliability tour of the Toronto Motorcycle Club for the Dunlop Tire trophy was held on Saturday and Sunday, September 28 and 29, with twenty-three riders indulging. The route was carried through Eastern Ontario over a 191-mile course, the main objective points being Peterboro and Cobourg. Four Harley-Davidson stalwarts came prepared for a clean-up, and they accomplished their purpose, two of the Milwaukee machines, with C. H. Russell and F. Rayney up, taking two of the three perfect averages and the other two being penalized only five points for slight mechanical defects. The third grand slam rider was Herb Greenwood, on an English Triumph. Four automobiles accompanied the riders to carry the officials for the run and to transport supplies.

Perfect weather was enjoyed on the first day, so that every contestant arrived at the night control at Peterboro, 90 miles away, with a straight record. Everybody in Peterboro that night knew of the presence of a bunch of riders in the town, as the boys cut things loose all over the place. The tourists were stirring again at daylight on the second day for some more fun, as they had to fill in the time until breakfast was served at 7:30. A number took a side trip at this early hour to visit the canal and lift lock which has made the place famous, and it was not until 8:45 that the officials ordered the start for the second leg of the trip. The bunch ran into a secret control exactly twenty miles outside of Peterboro, near Bewdley, but only a few had their wings clipped, as the margin of 1½ minutes each way was allowed. The noon control at Cobourg was reached on schedule time shortly after eleven o'clock, when a number of non-contestants who had come out from Toronto to meet the run, joined the cavalcade. Dinner was served at the Dunnham House by Mine Host Green, after which the final section of the tour was started at 1:30 with an 18-mile speed limit.

Soon after leaving Cobourg, the riders were stopped at a toll gate, which was conducted by a female official, and they there paid the usual fare, although the officers of the club had also paid for the whole party beforehand. When this was learned, Alex. McLean, of the Touring Committee of the club, went back in a car and demanded the refund of half the contributions, which he was finally given after some argument. The road was a good one, however, and the riders would not have objected to being held up because of the fine riding afforded.

Until within twenty miles of home, the ride had been a merry jaunt, but at this juncture storm clouds loomed up, and the rain fell in torrents, causing many perfect scores to be shattered in short order. Several beat it for home, including one or two of the official cars, but the remainder stuck to the job and finished as near to schedule time as greasy roads would permit.

A tally of the machines at the finish showed that the following makes made the trip: Five Indians, five English Triumphs, four Harley-Davidsons, four Excelsiors, two N. S. U.'s, one Merkel, one P. E. M., and one Budget-Whitworth. An English Douglas also started, but a broken belt caused a retirement.

The run was attended by many unusual incidents. The Harley-Davidson team looked like

winners from the start, as each man came with a watch on his handle-bar and a cyclometer on the front wheel. With one eye on the watch and the other on the cyclometer, each Harley rider never swerved from schedule time, and their watchfulness won the day for them.

Greenwood, the perfect scorer, lost five spokes from his Triumph near Peterboro when he was shot from the road by a frightened horse, but he commanded one spoke each from the other four Triumph machines and finished on time.

Two riders took passengers in sidecars and succeeded in finishing well to the front. Dr. W. B. Wurtz piloted an Indian T. T. seven and car in which sat A. M. Phillips. W. Luccock used a Merkel 6 and sidecar, and also kept up with the van. The passenger machines made good time on the muddy roads during the final dash for home.

One mile out from Peterboro, A. Thomas, Excelsior, went through a small bridge into a deep ditch, and he and his machine had to be pulled out by the pilot car. In spite of his experience, he continued and completed the route.

The magneto on E. J. Banfield's Triumph shorted one mile from the home control when he was running on time, and it took him half an hour to remove the trouble. His brother, Will Banfield, Triumph, also sacrificed a good score by remaining with him to help.

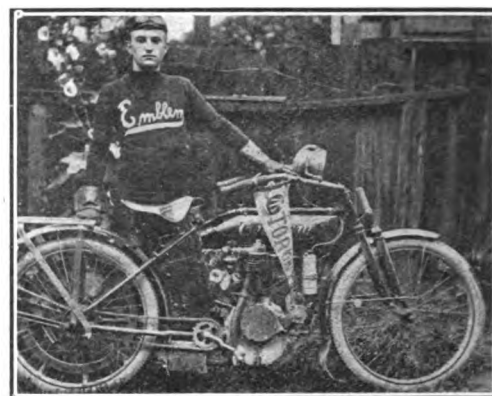
The following were the scores:

	Points.
H. Greenwood, Triumph.....	1,000
C. H. Russell, Harley-Davidson.....	1,000
F. Rayney, Harley-Davidson.....	1,000
A. Ottley, Harley-Davidson.....	995
S. License, Harley-Davidson.....	995
M. Newport, Triumph.....	993
W. Lewis, Indian.....	950
H. Thomson, Excelsior.....	940
G. Pratt, Excelsior.....	915
W. Luccock, Merkel and sidecar.....	912
C. J. Speers, N. S. U.....	909
H. S. Hodgkinson, Indian.....	891
Dr. W. B. Wurtz, Indian, sidecar.....	861
S. Platten, Rudge Whitworth.....	837
P. White, Indian.....	834
C. Burgess, Triumph.....	820
S. Wilkins, Indian.....	804

UTOPIA CLUB RACE.

BROOKLYN, N. Y.—The keen rivalry which has existed among the members of the Utopia Motorcycle Club of this city resulted in a five-mile handicap race on Sunday, September 29, on the Long Island Motor Parkway. It was agreed that the loser should provide a dinner for the rest of the contestants, and this resulted in an exciting race. Five entries were received for the event.

John Doeffer, with 15 seconds handicap, won the event in 4 minutes 50 seconds. He was hard pressed all the way by William Pflieger, who had the same handicap, and Doeffer won by only half a wheel's length. Ed Daly, with half a minute handicap, was a good third. James Frederick on scratch, the last man to finish, had to pay for the dinner, which was "some blow-out."



A TORONTO TOURIST.

J. C. RICHARDSON, of 72 Henry street, Toronto, who appears in the accompanying photograph on his Emblem, is one of the most active enthusiasts in the Canadian metropolis. He has made some long trips into little-known territory during the past summer and as a result he is a booster for good roads.

FOUR WITHIN TIME LIMIT

Rain Cut Down Big Field in Worcester Endurance Run Leaving Only a Quartet to Finish on Schedule.

WORCESTER, September 30.—Four riders finished within the time limit in the 24-hour endurance run of the Worcester M. C., which was started at 7 p. m. on Saturday, September 28. There were six teams of four riders each, three Indian, one Thor, one Harley-Davidson, one Excelsior and fourteen individual entries. The course was from Worcester to Providence to Boston and return to Worcester, a distance of 135 miles, on a 15-mile an hour schedule; then from Worcester to Springfield, Pittsfield, Albany and return to Worcester, a distance of 305 miles, on a 22-mile an hour schedule. Rain fell steadily from 9 a. m. to 3 p. m. on Sunday and many riders quit at Pittsfield on the out trip rather than plug the mud.

The four riders who finished within the time limit were Glen Crandall, of Boston. Thor; W. J. Walker, of Danvers, Harley-Davidson, two minutes late at Albany; W. F. Mann, of Boston, Thor, five minutes late at Albany and 19 minutes behind at Worcester; Johnson, of Worcester, Indian, penalties not known. Another Harley-Davidson rider covered the course and finished at 2 a. m. Monday. The roads were mostly macadam, but they were quite muddy on the return trip. A. C. Kennedy was quite seriously injured when he crashed into a stone buttress at a right-angled turn under a railroad bridge during the night.

FIRST PRIZE FOR STEVENS.

AT a meeting of the endurance run committee of the New Jersey M. C., of Newark, N. J., Wilber Stevens, of the Yale team was declared the winner of the special gold medal for the most consistent riding in the club's 24-hour run held September 14-15. He had a total of 995 points out of a possible 1,000. George Reichy, also of the Yale team, was awarded the second prize, a silver cup, his total being 973 points.



(Continued in next issue.)

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

SOLUTION OF THE LIGHTING PROBLEM

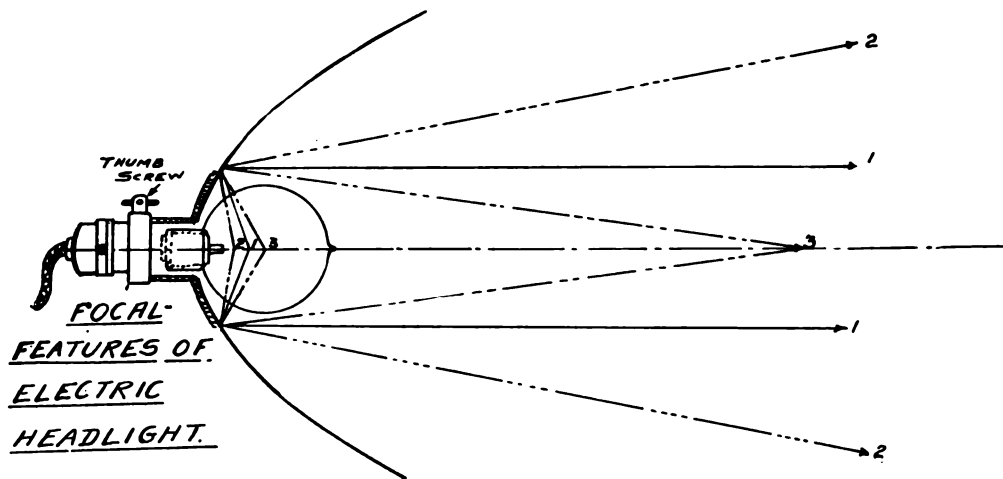
(Continued from page 44)

of the paraboloid. It is thus possible to focus for a far reaching beam of light, a diffused illumination, or illumination directly in front of the machine. Reference to Figure "B" will illustrate the possible focal adjustments.

It must be remembered that only those rays of light at the geometrical focus and thrown on the reflecting surface will be projected parallel to the major axis of the paraboloid.

When the lamp is at 1, the geometrical focus of the paraboloid, the reflected rays of light are parallel and a far-reaching beam of light is projected directly ahead. The usual geometrical focal length in an electric headlight varies from $\frac{7}{8}$ inch to $1\frac{1}{4}$ inches. By shifting the lamp to position 2 a diffused light is projected ahead, and the entire roadway is illuminated. If it is desired to have a short focal length the lamp may be placed in position 3.

This will have the effect of projecting the beam of light directly in front of the machine. The focal length is easily adjusted by means of a thumb screw, as shown in the illustration. This feature of the electric lamp has advantages over the acetylene type of lamp, in which the burner is permanently fixed relative to the focal length. Another desirable feature of the electric system is that it is unnecessary to dismount to light the lamp, as a



switch may be very conveniently placed on the handlebars and operated at will.

Source of Current.

The electric headlight for general illumination requires a two-volt, 18 to 20 ampere hour battery, with jelly electrolyte. This battery requires a space of about 3 x 3 x 6 inches. Its small size makes it convenient for storage in the tool box of the machine. The lamp used is usually a 4 c. p., 4-watt wire-drawn Tungsten, taking two amperes. One charge of the battery will give current to the lamp for about 8 to 10 hours of steady light.

The difficulties formerly experienced with carbon filament lamps, which continually gave trouble, due to the filaments breaking, have

been entirely overcome by the wire-drawn type of lamp. The gas generator possesses certain advantages over the electric battery, chief among which is the longer period of reliable light. A good generator will give light approximately four times as long as the electric battery, and it also indicates when the charge needs renewing. The gas generator, however, requires more room for stowage, and its weight is slightly in excess of the electric battery. A good scheme to follow is to have two systems of lighting on the machine, so that in case one fails there is still another one to fall back on. Experienced tourists are rapidly taking up this idea, and fitting a good gas lamp as well as an electric outfit on their machines.

THE NOVEL BRADLEY.

DESIGNED along the lines of the de Dion and Peugeot racing-voiturette motors, the duplicated-valve Bradley single-cylinder motor, made by the Bradley Motor Works, of Diamond street, Philadelphia, affords an un-

usually interesting power plant. The motor, which has been tested on the track at Point Breeze, is of the L-head type, but the exhaust valves only are in the chambers. These valves operate simultaneously, and the gases pass out at front and rear of the cylinder. The inlet

valves, also duplicated, are located in a chamber in the head and operated together by rocker arms and push-rods as in ordinary overhead construction. There are no cooling flanges fitted to this head, but the explosion chamber has six rows surrounding it. In the racing machine, the motor is mounted so as to incline slightly forward and the drive is by direct chain. The machine in the picture is known as the "Lightning Bradley" and is mounted by William Hollenbeck, the well-known Quaker City professional.

LEAVES SPLITDORF COMPANY.

P. J. G. KELLY, for many years associated with C. F. Splitdorf in the conduct of his large magneto and ignition business, has severed his connection with the Splitdorf Electrical Co., of New York City. Mr. Kelly's connection with the Splitdorf interests dates back nearly a dozen years and his retirement comes as a surprise to the trade. Mr. Kelly has no definite plans at present for the future and will take a much needed rest before returning to the industry when he will, it is rumored, be connected with another well known electrical concern.

CASINO COMPANY'S NEW HOME.

WORK is being rushed on the new home of the Casino Cycle & Supply Company, of Columbus, Ohio, in order that it may be occupied before the cold weather sets in. The new establishment is entirely of brick and affords far more spacious quarters than the old store. A new and complete repair shop is being installed, together with a neat salesroom and offices.

A MEETING has been called by the motorcyclists in Kewanee, Ill., for the purpose of forming a local club.



Repair bills—their most common cause.

Recently we made a canvass of repair shops in New York.

We asked the question: "What share of the gas engine troubles that come to you are caused by poor lubrication?"

The answers ranged from "one-third" to "70%."

Probably every owner of these damaged motors thought he was using a good lubricating oil.

As a matter of fact, oils that yield efficient lubrication are rare. And their wearing quality is often overlooked.

A worn-out oil ceases to lubricate.

Then comes trouble—pitted and burned-out bearings, "frozen" pistons, scratched cylinders, and even broken parts.

You cannot watch the lubricating process in your wrist pins, bearings and cylinders. But you can be sure of this—

An oil that is wearing poorly, is lubricating poorly.

Gargoyle Mobiloils were produced after careful study, by the world's authoritative leaders in scientific lubrication, the Vacuum Oil Company.

In wearing quality, few motorcycle lubricating oils on the market even approach them. We speak from experience. You can demonstrate it for yourself.

Though not low priced, in economy and lubricating efficiency we can safely say that Gargoyle Mobiloils stand alone.

Our chart of recommendations (printed on the right) shows the correct grade of Gargoyle Mobiloil for each make and model of motorcycle.



A grade for each type of motor

The various grades, refined and filtered to remove free carbon, are:

Gargoyle Mobiloil "A"

Gargoyle Mobiloil "B"

Gargoyle Mobiloil "Arctic"

They are put up in 1 and 5-

gallon sealed white cans, in half-barrels and barrels.

All are branded with the Gargoyle, which is our mark of manufacture.

They are handled by the higher class garages, automobile supply stores, and others who supply lubricants.

This list shows the right oil for your motorcycle.

Explanation: In this schedule the letter opposite the name of motorcycle indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means "Gargoyle Mobiloil A." "Arc" means "Gargoyle Mobiloil Arctic." Recommendations cover all types of the same make unless otherwise stated.

MODEL OF	1908		1909		1910		1911		1912	
MOTORCYCLE	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
American.....					B	A	B	A	B	A
Apache.....	B	B	B	B					B	A
Armstrong.....	B	A	B	A					B	A
Arrow.....									B	A
Augustin-Koch.....									B	A
Aurora.....									B	A
Auto-Bi.....	B	A	B	A					B	A
Black Hawk.....									B	A
Bradley.....									B	A
Breed.....									B	A
Crouch.....	B	B	B	B					B	A
Curtiss.....	B	A	B	A	B	A	B	A	B	A
C. V. S.....					B	B	B	B	B	A
De Luxe (1 cyl).....							B	B	B	A
De Luxe (2 cyl).....							A	A	B	Arc.
Detroit.....							A	A	B	A
Detroit Bi-Car.....									B	A
Eagle.....					B	B	B	B	B	A
Electra.....									B	A
Emblem (1 cyl).....			B	B	B	B	B	B	B	A
Emblem (2 cyl).....					B	A	B	A	B	A
Erie.....	B	B	B	B					B	A
Excelsior (1 cyl).....	B	A	B	A	B	A	B	A	B	A
Flanders.....									B	A
P. N.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Geer.....	B	A	B	A	B	A	B	A	B	A
Gerhart.....									B	A
Greyhound.....					B	A	B	A	B	A
Harley-Davidson.....	B	A	B	A	B	A	B	A	B	A
Haverford.....									B	A
Hilaman.....	B	A	B	A					B	A
Henderson.....									A	Arc.
Indian (1 cyl).....	B	B	B	B	B	B	B	B	B	A
Indian (2 cyl).....	B	A	B	A	B	A	B	A	B	A
Iver Johnson.....									B	A
Kokomo.....									B	A
Majestic.....									B	A
Manson.....	B	B							B	A
Marvel.....					B	B	B	B	B	A
Mayo (1 cyl).....	B	B							B	A
Mayo (2 cyl).....	B	A							B	A
Merkel.....	B	A	B	A	B	A	B	A	B	A
Minerva.....	B	A	B	A	B	A	B	A	B	A
Minneapolis.....									B	A
M. M.....	B	A	B	A	B	A	B	A	B	A
Monarch.....									B	A
Motorette.....									B	A
New Era.....			B	A	B	A	B	A	B	A
N. S. U. (1 cyl).....	B	B	B	B	B	B	B	B	B	A
N. S. U. (2 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless.....									B	A
P. E. M.....									B	A
Peugeot.....	B	A	B	A	B	A	B	A	B	A
Pierce (1 cyl).....			B	A	B	A	B	A	B	A
Pierce (4 cyl).....			A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pope.....									B	A
Racyle.....									B	A
Reading Standard.....	B	A	B	A	B	A	B	A	B	A
Reliance.....	B	B	B	B	B	B	B	B	B	A
Royal.....	B	B	B	A	B	A	B	A	B	A
Schickel.....							B	A	B	A
Scott.....									B	A
Theim.....	B	A	B	A	B	A	B	A	B	A
Thor (1 cyl).....	B	B	B	B	B	B	B	B	B	A
Thor (2 cyl).....	B	B	B	B	B	B	B	B	B	A
Torpedo.....	B	A	B	B	B	B	B	B	B	A
Triumph.....	B	A	B	B	B	B	B	B	B	A
Wagner.....	B	B	B	B	B	B	B	B	B	A
Yale (1 cyl).....	B	B	B	B	B	B	B	B	B	A
Yale (2 cyl).....									B	A

VACUUM OIL COMPANY, Rochester, U.S.A.

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When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

GIRL RIDER AT DETROIT

Miss "Cy" Woodman Figures in Another Spill and Court Proceedings But Continues Toward Windy City.

FROM Rochester—the last point at which you heard from me—I rode to Buffalo. There I was entertained at the Yacht Club and given a toolbox nicely equipped and a brass Buffalo was bolted onto my machine for good luck. From Buffalo I took a run to Niagara Falls; this road is poor going. The road into Erie, Pa., was good, considering the heavy rains. Right here I stopped and picked up a little puppy, so young it hadn't its eyes open and I had one awful time trying to persuade some folks to take care of it. One sees any number of signs along the road reading, "Go Slow," and about half a mile further on one reading: "Thank You."

In Cleveland I was presented with a pennant designed especially for me and inscribed: "Cy. Woodman, N. Y. to Frisco." One of the city newspapers came out with a supposed interview, where I was quoted as hurling a brick-bat at my sex. At Cleveland I took the steamer to Detroit, Mich., to go out from there to Pontiac, the birthplace of my Flanders 4. The new twin model was sent out to meet me with a number of 4's. On my return trip into Detroit that evening, going through Royal Oaks, I struck three miles of almost impassible road and was told by one of the councilmen of the town to ride on the sidewalk. I was riding slowly and everything was going along smoothly, when without a moment's warning a man jumped out from behind a tree, threw himself against my machine and knocked me over into the road, shouting, "You'll not ride on this walk." He claimed to be the sheriff, but couldn't show his badge. He didn't have one to show. I was about all in when a "gentleman" appeared on the scene. Leaving him to guard my machine, I walked back into the village and telephoned for the real sheriff to come and get my man, which he did. I had the extreme satisfaction the next morning of seeing him pay \$42.13 for his evening's sport. It developed, as I thought, that he did not want anyone to use his walk to ride on.

Two M. D.'s and a Doctor of Osteopathy, who offered her services, fixed me up. My arm is still bandaged and the vibration from the handlebars does not help any. I have been held up five days and if many more delays occur I'll land in 'Frisco about in time for the Panama Exposition in 1915. A race committee extended an invitation to do a mile on the State Fair Track at Detroit, where they pulled off an automobile race, but I declined. The record for the track is a mile in 47 seconds. My record is 47 miles in an hour. Just now that is plenty fast enough for me. I was given an electric flash light before leaving the city. It has been very cold out here for the last week; heavy frosts with the thermometer registering thirty.

"CY" WOODMAN.

THE first annual reliability run of the Ohio State F. A. M. will take place October 11-13. Jesse Campbell, State F. A. M. commissioner, has laid elaborate plans for the run and it is expected to be the liveliest event of the season.

RACING CALLED OFF.

NEWARK, N. J., September 30.—Advertisements announcing motorcycle races at the motordrome raised such a storm of protest from residents in the Vailsburg section that Manager Paul Derkum decided not to attempt to run them yesterday and a foot race was put on instead, the public being admitted free.

A four-foot wire fence has been placed at the top of the Newark bowl, lying almost horizontal to the perpendicular wire fence which was intended to safeguard spectators, and Chairman Thornley of the F. A. M. competition committee, after viewing the improvement expressed the opinion that the track is the safest in the country. Racing has now been called off for the season on the bowl, but the management counts upon starting it early next year. Ray Peck and the other Western riders have left for their homes.

A BROOKLYN ENTHUSIAST.

W. B. BLEE, a Brooklyn (N. Y.) oculist, who is also a full-fledged sidecar enthusiast, appears in the accompanying photograph with his wife and child. Blee uses an Indian machine and Simplex sidecar, and has



experienced no trouble in making trips of considerable length into the country, with his outfit loaded as in the picture. He is of the opinion that the professional man who is confined the greater part of his time, and unable to take other exercise, will derive more pleasure and healthful recreation from proper use of a sidecar than in any other way.

SIDECAR TRIP TO BOSTON.

UP Toronto way everybody is talking about the new 1913 Indian models. There are many rumors concerning spring frames, spring saddle posts, three-inch tires and the like, but Herb Kipp, the Hendee Canadian salesman, will not say a word.

The Kipp family, including Mr. and Mrs. H. W. Kipp, and Mr. and Mrs. H. M. Kipp, have just returned from a sidecar trip to Boston and return, the two ladies occupying the "bath chairs" attached to the T. T. seven Indian mounts. Fine weather and excellent roads were encountered on the outward bound trip, but on the return journey the roads has been torn up in a great many places as is usual in the fall.

CLEVELAND'S QUICK DELIVERY.

A MOTORCYCLE quick delivery company has been launched in Cleveland for the second time. The first company did not make a success of the business. This time two of Cleveland's oldest riders, A. C. Schrieber and H. H. Huntsberry head the company. Twin Indians are to be used with side delivery vans.

CONSTANT'S TALE OF WOE

Brooklynite Made Big Jumps in the West But Couldn't Find a Dry Spot.

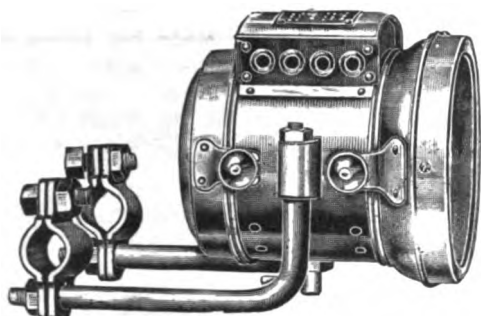
WHEN Johnnie Constant, premier speedster of the amateur division, drifted back into New York a few days ago after a road tour he was nursing a well-developed grouch, and not without reason. Constant went out to Milwaukee to participate in races scheduled for the State fair, but trotting enthusiasts monopolized the track on the first day set for motorcycle racing until it was too dark to ride with safety. A conference was held in which Constant, Don Klark, State Referee Carpenter, William Harley, of the Harley-Davidson company, and other riders and promoters participated. It was decided that the fair management had given the motorcycle boys a flabby deal, and it was forthwith announced that the racers would not compete at the track on the following day. What's more the whole affair has been called to Craiman Thornley's attention and the Milwaukee fair management may not be given another sanction.

And that wasn't all. From Milwaukee Constant jumped to Marshall, Minn., to put in a few days shooting prairie chickens, but he hadn't seen a chicken—prairie or otherwise—before he was wired to compete in races at Madison, Wis. It was a hop of 566 miles, but the Brooklynite made it. Then it rained. And rained. Constant jumped to Chicago for races scheduled there. But it rained. Then he hustled off to Toledo for a big meet. And it rained again. "S' enough," said the Brooklyn speedster and he returned home, arriving in New York during a shower.

CAMPBELL'S NEW STAFF.

JESSE CAMPBELL, of Dayton, State Commissioner for Ohio, has been hitting only the high spots of late in his campaign to boost the F. A. M. organization in Buckeye territory, and that he is getting results is indicated by the following list of newly appointed county commissioners:

Erie County: Edw. C. Hinkey, 401 Market street, Sandusky; Richland County: Fred Dippman, 22 Willow street, Mansfield; Marion County: G. F. Lentz, 226 East Center street, Marion; Hamilton County: Walter S. Browne, 503 Neave building, Cincinnati; Muskingum County: Perry D. Gath, Wedge Garage, Zanesville; Crawford County: A. G. Flannery, Galion; Shelby County: Paul Monroe, 105 Court street, Sidney; Seneca County: F. A. Copley, 134 Centre street, Fostoria; Fayette County: S. J. Van Pelt, care Maxwell Auto Livery, Washington C. H.; Loraine County: Hart A. Dickason, 345 Broad street, Elyria; Franklin County: C. E. Livingston, 527½ Fourth street, Columbus; Ross County: Walter W. Brust, 511 Allen street, Chillicothe; Montgomery County: Carl Coppel, 123 East Fifth street, Dayton; Summit County: C. B. Mitchella, 179 Gale street, Akron; Champaign County: John K. Hendrickson, R. F. D. No. 5, Urbana; Miami County: W. O. Lane, 19 South Cherry street, Troy; Clarke County: Chas. T. Henderson, 36 South Limestone street, Springfield; Clinton County: Jack W. Vance, Wilmington; Stark County: H. F. George, 1316 East Lake street, Canton; Morrow County: Ivan Schench, Cardington; Licking County: E. R. Francis, Granville street, Newark.



SEARCHLIGHT No. 102, showing back closed.

20TH CENTURY Points of Superiority

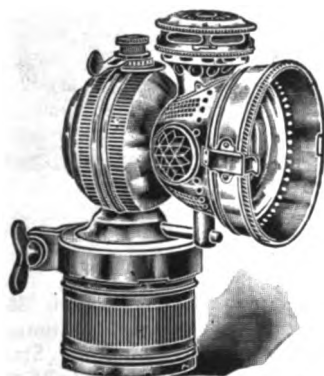
- 1—**CONSTRUCTION:** Built of heavy gauge brass, riveted throughout. So solidly made as to withstand the hardest kind of use—no jar will ever put out the light.
- 2—**DESIGN:** The lighting principles and design used in the big naval search-lights have been followed in 20th Century Lamps—a strong, powerful ray is thrown **directly ahead** (the danger point). Best 4-in. mangin mirror lens, well focused.
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- 4—20th Century Generators—like no other generators on the market—have a **Special Locking Device** that insures gas-tight lamps always, but which also insures easy locking and unlocking. **No screw threads to tighten or corrode.**
- 5—20th Century Bicycle Lamps are lamps that will **really** keep lighted. They are always up to the same standard of excellence.
- 6—**RELIABILITY:** Over 20 years manufacturing lamps is your guarantee for **Reliable lamps.**

Jobbers write for new terms and prices. Also ask for cuts for your catalogue.

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BICYCLE LAMP, Model No. 2.

Perfect Transmission

To be worthy of "perfect," the transmission must be consistent all times. It by neither heat nor moisture, nor conditions. It strength to withstand the hardest kind of usage, into its construction materials of such the most extraordinary abuse will only sustaining power.

the term "permitting gear" should be affected nor cold, dryness any other outside must have ample stand the hardest and, above all, tion must enter a character that ordinary kind of tend to prove its ers. That is why

"The Coventry" CHAINS

are almost universally conceded to most closely approximate the condition "perfect."

Strength Endurance
Speed Silence

These four qualifications have been solidly built into "The Coventry" Chains. From the raw bar of material to their finished state, excellence of material and conscientious workmanship guarantee to you, the user, the highest perfection any transmission can attain.

Our catalog is both instructive and interesting. Write for it.

Sarco Engineering Co.
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M-M Announcement

1913 Models

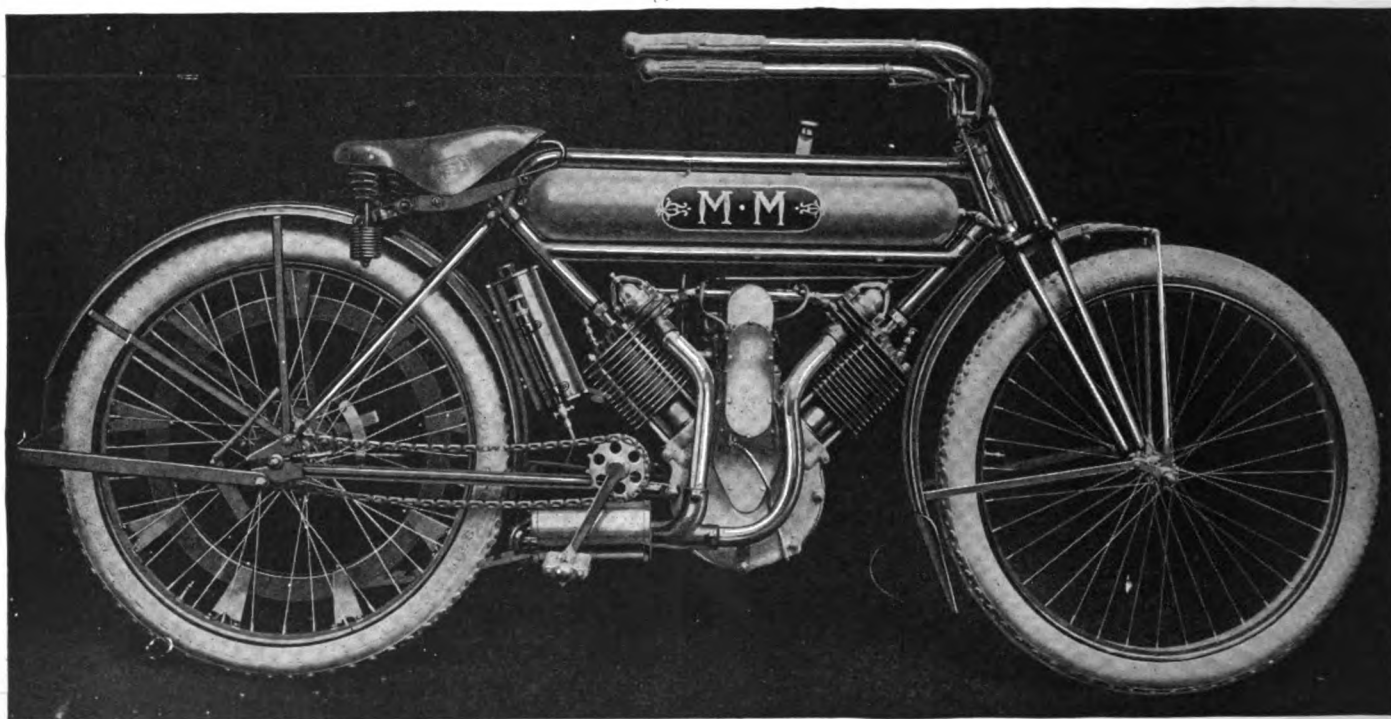
Dealers, we are ready for you. Ask us about the two new models.

Both simply bristle with good points and possess all the latest approved features that appeal to the riders.

The big 8 H. P. Twin with the improved 90-degree motor and Eclipse Free Engine Clutch—most powerful hill-climber and smoothest-running motorcycle built **\$240**

The 4½ H. P. Single—the slickest-looking and most satisfactory single-cylinder model yet produced. Many important 1913 improvements in both general design and details of construction **\$200**

M-M Dealers—Now is the time to apply for renewal of contracts for 1913 and order your samples. Some open territory still left which we will place in the hands of the best dealers. Write or wire today.



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Main Distributing Stores
GEORGE P. JENKINS - 256 West 55th Street, New York
AMERICAN MOTOR COMPANY, 2724 Michigan Ave., Chicago
CALIFORNIA MOTORCYCLE CO., 818 S. Main St., Los Angeles

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

FOR SALE.—6 h. Flying Merkel; run about 390 miles; in first-class condition. O. Milligan, 723 Garfield ave., Middletown, Ohio.

EMBLEM FOR SALE.—First class condition. Complete equipment. \$125 buys it. H. C. Johnson, Quincy, Ill.

FOR SALE.—English Rex, speed king model; very powerful. Price \$140. Emerich Spitzer, 1821 Topping ave., New York.

FOR SALE.—Indian fore-car, 28 in. wheels with good tires, one nearly new; brackets for side lights; bright red Indian enamel; perfect condition. Just the thing for some Indian rider who wants to take his wife along. Price, \$35.00. American Motor Co., 256 W. 55th st., New York.

DO YOU WANT to sell or exchange your Motorcycle? Let me tell you an easy and sure method. Particulars free. F. W. Johnson, 318 W. Washington st., Chicago.

FOR SALE.—1912 Thor 7 h.; brand new; never used. Will sell for best offer. Must sell account ill-health. Clyde Koogle, Myersville, Md.

"EUREKA."—Emergency Gasoline Tank Valve, screws in place of the ordinary gasoline tank needle valve. No soldering or altering necessary. By feeding the gasoline from a point above the bottom of the tank, it reserves one-fourth of the capacity of the tank for emergency. Removes all worry regarding gasoline supply. Made to fit Indian, M. M., R. S., Haverford, Excelsior, and Merkel. Price \$1.00, prepaid. Discount to dealers. Wm. E. Waldron, 411 N. Mercer st., New Castle, Pa.

DON'T buy a V-belt until you have seen the Duke V-chain belt. Write for circulars. J. Dukelow, 4509 Wilcox ave., Chicago, Ill.

MOTORCYCLE TIRE BARGAINS!—A. C. C. A. prices talk! Diamond, Goodrich, G. & J. and other standard makes, guaranteed; Gridiron, Basket and Bailey Treads; 28 x 1 1/4, \$3.00; 28 x 2 1/4, \$5.70; 28 x 2, \$4.95; 28 x 2 1/2, \$6.20; 28 x 2 3/4, \$5.45; 26 x 2 1/4, \$6.20. Guaranteed. Tubes priced proportionately low. Shipped on approval. Don't buy until you receive our price list! The Automobile and Cycle Company of America, Dept. X, 1769-1787 Broadway, New York City.

FOR SALE.—M. M. motorcycle, 1909, magneto, 4 h., in perfect working order, price \$65. R. J. Metz, 171 Baltic street, Brooklyn, N. Y.

FOR SALE.—7 h. p. Flying Merkel, \$175; 1912, 4 h. p. Indian and Flanders at \$125 each. All in perfect shape. Callwell's Motorcycle Agency, 5 South Water street, Newburgh, N. Y.

FOR SALE.—Eclipse Free Engine Clutch, latest style lever control, V-belt style, practically new, for \$6.90. No. 1, high-pressure Brazer 10-gal. tank with gauge; used only once; will trade for auto casing, 30 x 3. A. A. Jordan, Athens, Ga.

FOR SALE.—1911 Reading Standard, 4 h. single belt drive, new tire, free engine clutch, extra fine condition. Big bargain for \$125. George Ream, Greenville, Ohio.

FOR SALE.—Henderson demonstrator, \$225; Reading Standard, with clutch \$100; Prestolite tank, \$5; Old Sol No. 8 Lamp, \$5; Aermore Exhaust Horn, \$6. Melrose Motorcycle Agency, 111 First st., Melrose, Mass.

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MISCELLANEOUS

MOTORCYCLE STOLEN.—On East street, Thursday, August 29, 1912. Excelsior 1912 model, 7 h. p., chain drive, Presto tank, light, tandem, U. S. Tires. Color, gray, with red trimmings. Dent in rear rim. Number stamped on motor crank case, No. 37563. \$50 reward. E. P. DeBerry, owner, 374 Grove street, San Francisco, Cal. Address information to Chief of Police, San Francisco, Cal.

FOR SALE.—Substantial interest in Curtiss & Marvel Motorcycle Co. to practical motorcycle parties who will put in money against stock of parts and goodwill and take active management of the motorcycle business. Entire time of present management required for our aeronautical business. Address C. R. Hall, Secretary Curtiss Motor Co., Hammondsport, N. Y.

DEALER'S CARDS, Etc.

RIVERSIDE MOTORCYCLE GARAGE.—DISTRIBUTORS FOR READING STANDARD. AGENT FOR EAGLE. SECOND-HAND MOTORCYCLES. REPAIRS AND SUPPLIES. 533 W. 110 ST., NEW YORK.

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Gentlemen: Just a line to let you know what I think of the Continental-Erie Motorcycle Tires. I have been riding a motorcycle for the past seven years and during that time have used all the leading makes of tires. I have never found any tire that has given me the service that the Continental-Erie Motorcycle Tires have given me. At the present time I have a pair of these equipped on my machine that I have used for over 4,000 miles, the majority of this distance having been ridden with a tandem attachment and another party on the machine over country roads.

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Wishing you continued success with your tire, I am, very truly yours,

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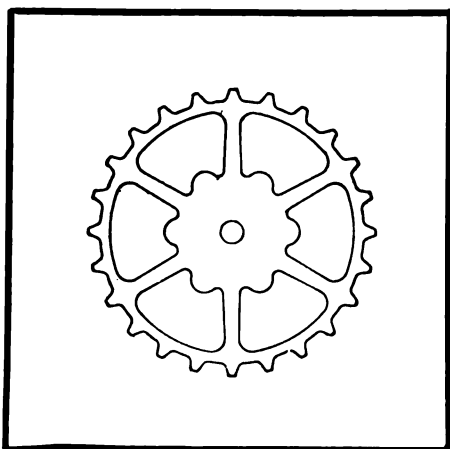
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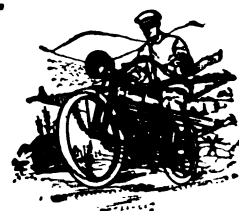
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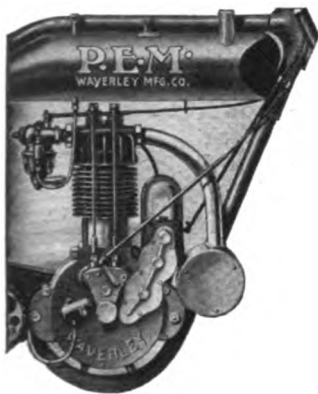
It Insures a Good Spark

We are just conceited enough to claim that in the Auburn you will find the

Most Efficient, Durable and Lasting Motorcycle Plug on the Market

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The Reason

The P.E.M. has taken 16 Firsts in the 20 races it has run is shown in this little cut—Look at the points:

Overhead mechanical valves—giving accurate firing with high compression.

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Positive Mechanical Oiler that never fails—The higher the speed, the more oil fed into engine.

Chain driven, positive, sure and very fast. If you would be a winner—on the track or on the road—Ride a P.E.M.

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TWELVE THOUSAND RIDERS

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THE MART

Our Classified Advertising
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¶ This is a fact we realized and watched when we first designed the

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29" x 3"

Motorcycle Tire

¶ We built a tire in which there were no weak points—built it with the kind of material and the kind of workmanship which could mean nothing but strength in the finished tire.

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¶ It takes a hammer to crack a J-D Porcelain. Heat can't do it. Every claim to the superiority of this product has been vindicated—and more—by a new experience. A great motor car factory burned to the ground on the first day of last June. It was the fiercest conflagration ever recorded in the automobile industry. Heavy brick walls crumbled like cardboard; steel rails



twisted and curled like glowing serpents along the ground; immense steel girders bent and writhed in the flame; piles of aluminum castings melted into a white hot pool. When the fire had burned itself out, nothing remained but the smoking wreckage of a plant and stock worth half a million.

¶ Workmen started in to sort out the junk. Twenty-seven cars ready for shipment had been standing on one of the floors. Their scarred skeletons were found deep in the wreckage, where the flames had been hottest.

¶ Every motor had been equipped with J-D Spark Plugs. Not a single Porcelain was cracked!

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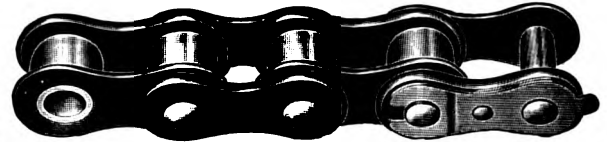
¶ This same quality of porcelain enters into every spark plug produced by the Jeffery-Dewitt Company. When you buy spark plugs again buy the best—the J-D line—the kind that defy heat, besides being carbon proof, soot proof, oil proof. Satisfaction guaranteed or your money back.

¶ Write for our motorists' classic: "Ignition and Spark Plug Talk." It's full of good pointers and timely information. A new edition is just off the press.

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Every "Whitney" Chain has a reputation back of it, a reputation of having been tested in the most trying service and never failing to make good. We've made chains for years and through our untiring efforts to produce nothing but the best our chains have gained a remarkable reputation. You can't go wrong by placing a "Whitney" on your machine.



When making replacements insist on a "Whitney" and get acquainted with its merits.

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Superiority Wins!

Eight months ago we announced to the trade for the first time our now famous line of DeLuxe Motorcycle Motors. Today many prominent motorcycle manufacturers are using DeLuxe motors and they are the most talked of sensation of the present season.

Why?

Because of the following noteworthy features, some of which are:

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- One Part Crank Case with Cover.
- Improved Cam and Magneto Drive.
- Oil Tight Motor.
- Positive Oiling System.
- Silent Operation.
- Simplified Design Throughout.
- Reduced Number of Parts.
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FOUR SIZES

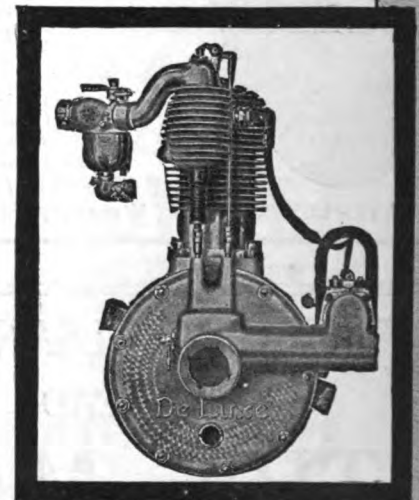
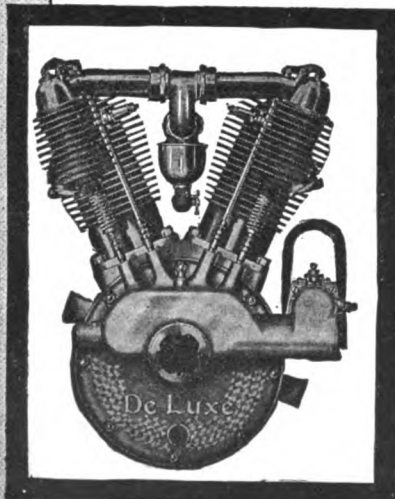
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1913 Will Be a DeLuxe Year

Motorcycle Manufacturers, place yourselves in a position to supply the certain demand.

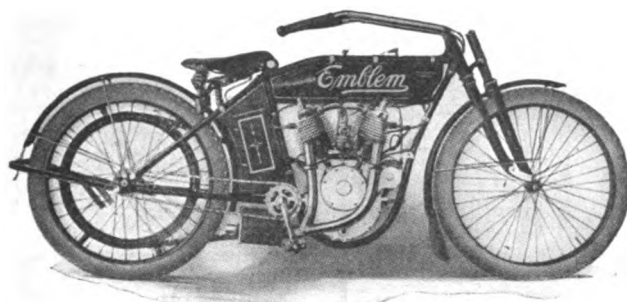
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Motors DeLuxe



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Voters! Attention!



READ THE EMBLEM'S PLATFORM

THE EAGER EMBLEM



READ THE EMBLEM'S PLATFORM

As a candidate for the office of the Ideal Motorcycle, the EMBLEM herewith gives its platform:

- 1st: To serve its rider with unswerving strength and fidelity.
- 2nd: To be free from any and all imperfections.
- 3rd: To have in full measure strength, speed, simplicity, comfort and durability.

Vote for the EMBLEM. It has already served long terms honorably and well. Its last achievement was the transportation of Mr. and Mrs. Gale across the continent, through the deserts of Arizona, the wilds of Wyoming, the mountains, the hills, the sand, the mud, the water; the thousand and one conditions existing between Angola, N. Y., and Los Angeles, Calif., a journey second to none for its constant strains and hardships. The EMBLEM finished "under wraps." It could start back again, at once.

When casting your ballot, put a cross in the circle under the EMBLEM.

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We Can Deliver a Majestic Side-Car to You Immediately

And it will give you the same service as it does to these satisfied users

PROVIDENCE, R. I.

MAJESTIC MFG. CO.,
Worcester, Mass.

GENTLEMEN:—Your letter of recent date is at hand and contents noted. The Side-cars are becoming very popular here and a great many will be sold. Today is Tuesday and my men are now fitting a Majestic to an Indian motorcycle, and that's the second Majestic I have sold this week. I have no more in stock now, so please hurry deliveries on orders I have on file and at the same time ship me another Red Car for Indian machine. The Side-car I used for demonstration proved very handy to me during the time I have been moving to my new location.

One instance I will mention when I carried six men from old store to new building, two sitting in Side-car, one on saddle, one on rear carrier, one standing on each footboard of the T. T. Indian I use for Side-car regularly.

I took a Side-car over the roads to Columbus, Ohio, to attend the F. A. M. meeting, and had a very pleasant and successful trip.

Yours very truly,
B. A. SWENSON.



RICHMOND, Ind., June 27, 1912.

MAJESTIC MFG. CO.,
Worcester, Mass.

DEAR SIR:—Some time ago Waking & Company, the motorcycle agents here, received a letter from you asking for information regarding your Side-car. He turned the letter over to me, I being the purchaser.

I am enclosing small photo of myself and lady friend taken in one of our city parks. You may keep this photo or tack it on a fence, or you can use it in your advertising.

I ride an Indian machine. We make from one hundred to 180 miles in a single day's run, using very little more gas than when alone. Our combined weight is 323 lbs., but we go everywhere we want to go over all kinds of roads, and they all say that the SIDE-CAR rides easier and smoother than any automobile.

If I ever wear this out, I hope you will be in the business, so I can get another.

If you care to, you can fix it up to suit yourself and use it for advertising. It will be all right with me.

Yours truly,
CHAS. A. TANGEMAN.

THE BIGGEST BUSINESS BRINGER IN THE MOTORCYCLE FIELD

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MOTORCYCLE  CLOTHING
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Dress Like a Gentleman

There's nothing like the satisfaction of knowing one is making a creditable appearance on a motorcycle, and the added comfort of well fitting clothes is not to be overlooked. The wearer of "Aurora Brand" Motorcycle Clothing alone knows the meaning of **STYLE** plus **FIT** plus **DURABILITY** plus **COMFORT**.

**Strength in Every Fibre
Quality in Every Thread**

DEALERS who have found that this year's business has not altogether met their expectations should write us for our proposition.

No "Aurora Brand" dealer has yet had occasion to complain of "poor business."

Fowler-Carnes Company
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is what we have been giving each customer for nine years.

That is why we have grown from a small room in 1904 to a store in 1907—and from a rented warehouse in 1910 to a three-story concrete 150x30 building in 1912. We build again next year to take care of the 104% increase in our 1912 sales over 1911.

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Why don't you save \$ \$ \$, delays and trouble, too ?

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To be really efficient a side car must be prepared to withstand the terrific strain of negotiating rough, rocky, rutty roads as well as bowling along well-paved boulevards. For this work THE BAXTER SIDE CAR is most eminently fitted.

Its reinforced frame construction, its tension spring wheel, its solid Bessemer steel hub spindles, its body of Indian rattan, its heavily upholstered cushions—all tend to make it the strongest, the lightest, the most durable and, at the same time, the most comfortable side car on the market today. Prices, \$60.00 and up.

Dealers, write for our 1913 proposition and terms

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BAXTER SIDE CAR CO.

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Afford Perfect Traction— Prevent Slipping and Skidding

Mud, sand, slippery pavements or snow will not spoil your sport if you always carry Weed Chains.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write Dept. B for particulars

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WEED ANTI-SKID **CHAINS** FOR **MOTORCYCLES**



Speed
With Safety
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Veeder

**Motorcycle
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Adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.

Specially constructed to withstand hard motorcycle usage

Easily adjusted to any motorcycle. Made for 24, 26, 28 and 30-in. wheels.



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Price complete with bracket and striker **\$3.00**

Also makers of Odometers, Tachometers, Counters and Fine Castings.

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The Monarch

"The Big Single with Twin Power"

The Monarch is all the time surprising its riders—but always pleasantly. Undaunted by tradition surrounding this or that hill famed for its unclimbable qualities, the Monarch breezes along as if that "bugaboo" hill were not there. The Monarch rider can look with indulgence upon the man astride a single of another make. The truth of the matter is the Monarch is a twin without the trouble of two cylinders—nor the expense. It's worth your while to investigate.

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KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

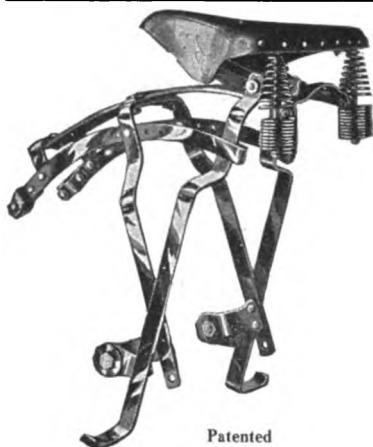
Low Cost
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Long Wearing } **TIRES**

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Simplex Spring Tandem Attachment

Immediate Deliveries

On Simplex Tandems and A-K Carriers

ORDERS SHIPPED SAME DAY RECEIVED

Write or Wire Us Your Requirements Today

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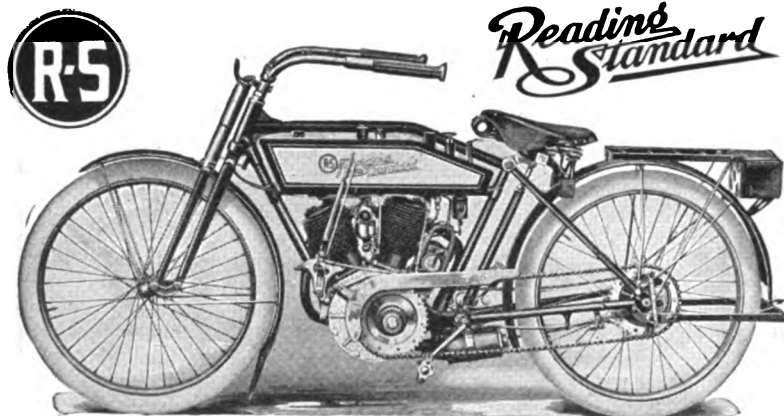


A-K New Type Carrier Cushion.
Attachable

The R-S spoils its rider for any other machine

So manifold are the conveniences which the R-S affords its rider in addition to its renowned motor efficiency that such a rider instinctively looks for such conveniences on other machines, but in vain.

Footrests, double brakes, double oiling system, the R-S shock absorbing spring seat post, adjustable to weight of rider; these are but a few of the "trimmings" which carry out to the smallest detail the policy of Service plus Comfort. Then, too, its powerful, silent, long-stroke motor with imported ball-bearings, mechanical intake valves and integral cams and gears serves to give the R-S buyer *more value, more service, more satisfaction.*



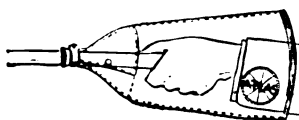
Dealers—Applications will now be considered for 1913 territory. Delay may mean a loss to you. So write us *at once.*

Reading Standard Co.

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NOW IS THE TIME TO STOCK UP

With Atlas Fur-lined Hand Windshields and our other Cold Weather necessities.



We manufacture a complete line of Leggins, Magneto Covers, Luggage Carriers, Tail Lamps, etc.

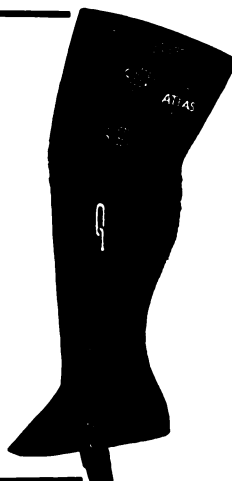
Mohair, Wool lined, per pair, \$1.50.
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Leather Leggins, \$1.00 per pair and up.



Jobbers and Dealers get our proposition. Write for our up-to-date Catalog.

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JOIN THE F. A. M.

Every rider of a motorcycle should join the

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AS in the history of the bicycle and the automobile, the rider of the motorcycle must contend with that class of disgruntled humanity that fights everything new.

The F. A. M., through its legal department, opposes such unjust discrimination. It controls everything in the way of contests, and maintains a condition of honesty and fairness therein.

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TRADE MARK

FOR MOTORCYCLES



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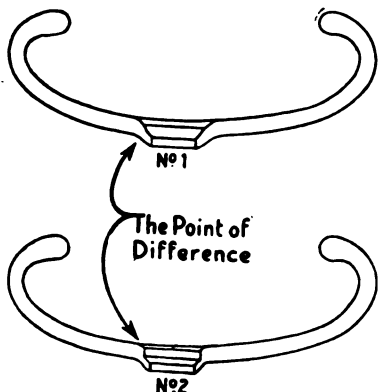
4 H. P. ROADSTER.

We build machines for the man who requires all of these. Write for Agency proposition.

For the man who is critical. For **THE MAN WHO KNOWS**.

This year's model of **THE NEW ERA** satisfies a long-felt want in the motorcycle world. **LET US SEND YOU OUR CATALOGUE.**

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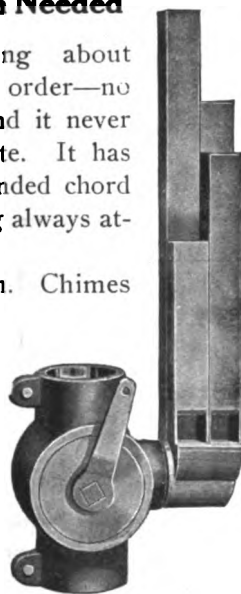
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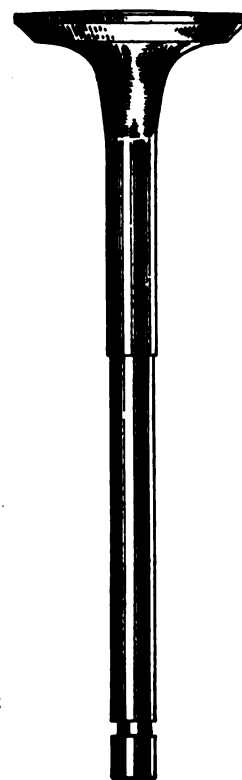
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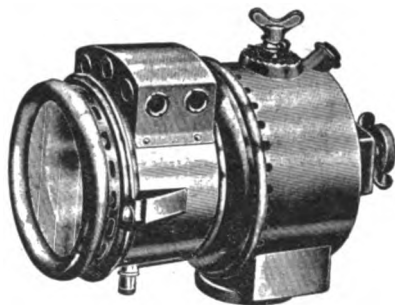
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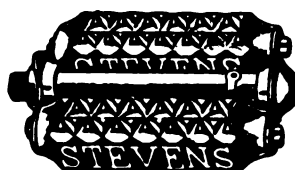
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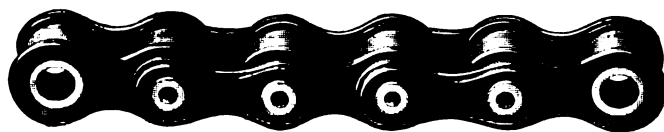
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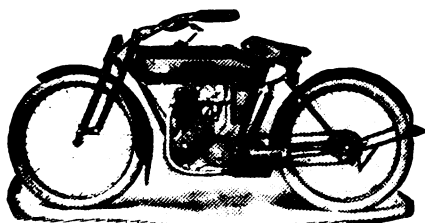
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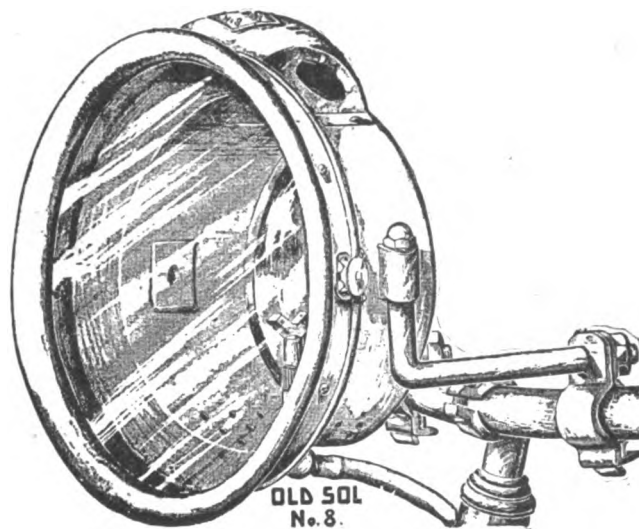


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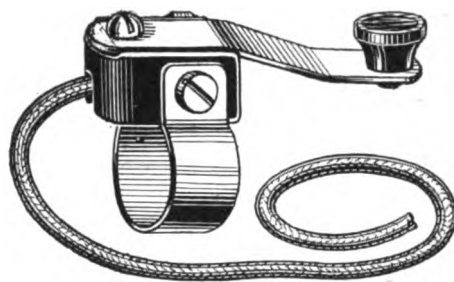


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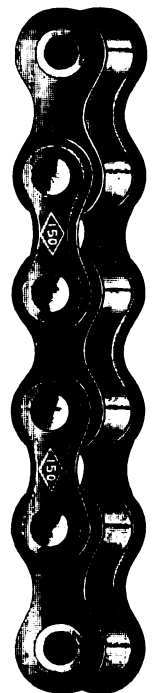
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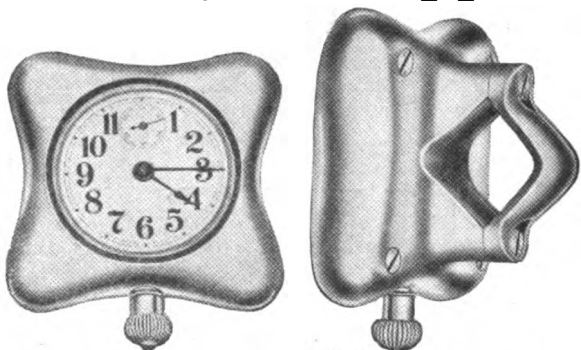
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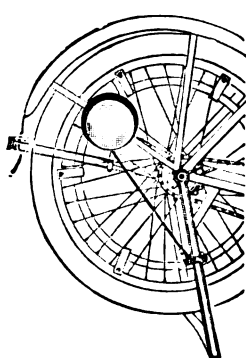


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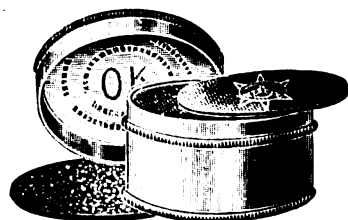
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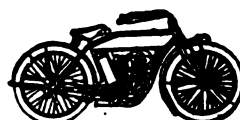
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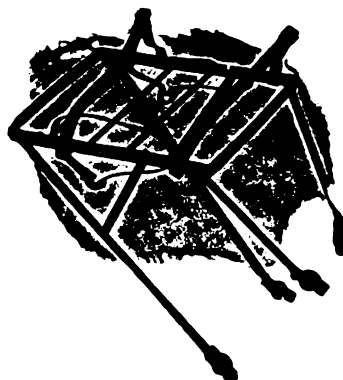
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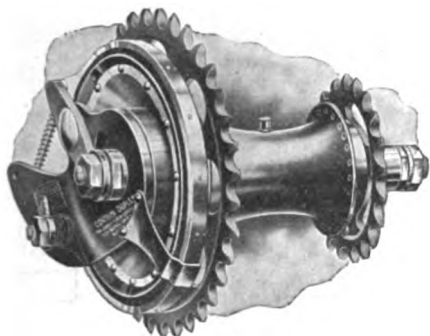
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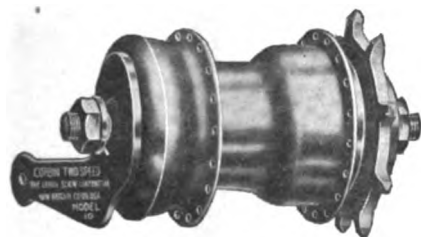
THE CORBIN LINE OF BRAKES AND HUBS



Corbin Band Brake

FOR MOTORCYCLES

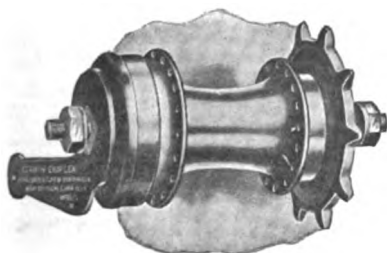
Nearly 50 per cent. of all motorcycles made in America today are equipped with this brake. The 1913 model has two important improvements; a nut-lock is formed by two projections on the end of the arm connecting band, securely holding the nut from turning or jarring loose; a bracket attached to the lower side of brake arm keeps the band from dragging on the drum or sagging when expanded.



Corbin Two-Speed Coaster Brake

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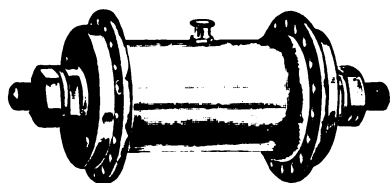
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Corbin Front Hub

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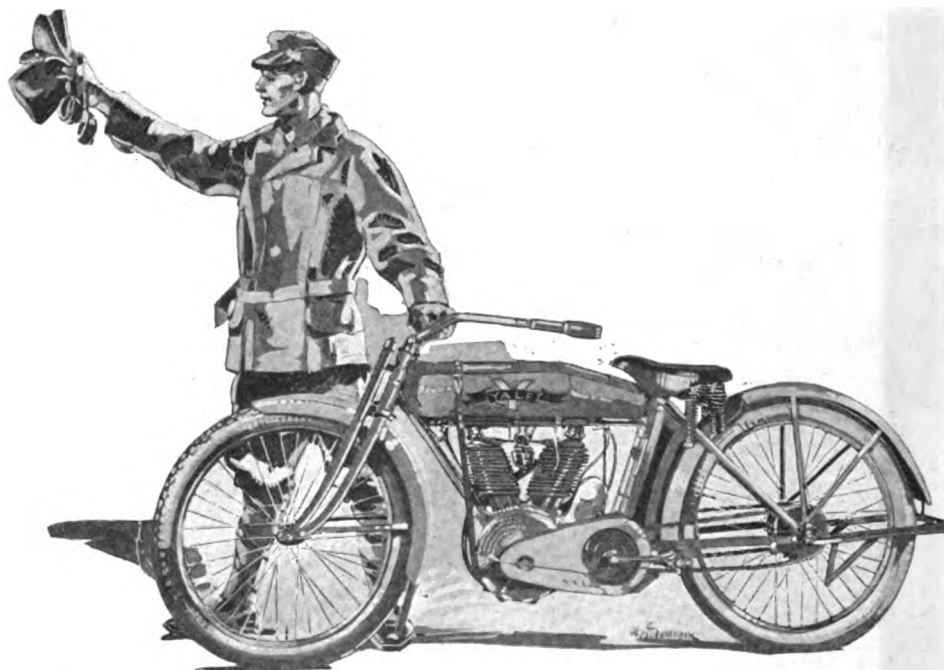
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We will give Yale dealers the most superb sales co-operation any motorcycle dealer has ever had.

We will give you live prospects who will be convinced that the machine they want bears the Yale nameplate.

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There is great big money ahead for Yale dealers—you should get some of it.

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1913 { 7-8 H. P. Yale Twin, \$275 } f. o. b. Toledo
 { 5-6 H. P. Yale Single, \$225 }

Battery and Bosch Magneto; V-Belt or Chain Drive; Long-Stroke Motor ($3\frac{1}{4} \times 3\frac{43}{64}$ "); speed of single, 40-50 miles per hour; Horizontal Cooling Flanges; Strong Drop Frame; Famous Y-A Shock Absorber; Vibrationless Cushion Fork; Perfect Grip Control; First Hinged Mud Guards; 3-in. Tires; Reliable Transmission; Improved Free Engine Clutch; Heitger Carbureter; 10-12 Gauge Spokes; $2\frac{1}{4}$ -gal. Gasoline Tank; 1-gal. Oil Tank (separate); Weight, 185 pounds; Wheelbase, $57\frac{1}{4}$ in.

Yale advertising is going to be so big, so sensational—and so continuous—that it is bound to win—and back of it will be the conscientious construction principles that have made the Yale name synonymous with reliability.

We will see to it that the gospel of Yale goodness and Yale consistency is spread broadcast over the land—but it's up to you to say whether or not you'll help us reap the harvest, by taking over the Yale agency (or just keeping it) and pushing as hard as you know how.

Yale Features

Yale features (most of them exclusive, by the way) are so many and varied we can merely indicate them here.

The powerful motor has never yet tackled any obstacle could not overcome; the horizontal cooling flanges were first introduced on the Yale Twin and proven to be the only correct ones in principle and practice.

The shock absorber is so great that it can't be "killed" by the famous Y-A Shock Absorber; while the perfected Yale grip control works infallibly.

Yale offers the first hinged mud-guard on any motorcycle. This will prove invaluable in the mending of tires.

Yale offers not only large $2\frac{1}{2}$ -gal. gasoline tank and 1 gal. oil tank (separate), but it also gives, for the first time, 3-inch tires as regular motorcycle equipment.

Yale Construction

Besides the Yale equipment features the Yale dealer also has the tremendously important feature of Yale construction.

The Yale has more parts made in its own factory than any other motorcycle made.

It has its own drop forging plant; and where other motorcycles use metal stampings the Yale has Yale drop forgings—drop forgings that make for sturdiness and insure safety.

Not a single Yale fork or frame broke in 1912. What other machine can claim such a record?

Such facts as these will be told to the motorcycle-buying public—again and again.

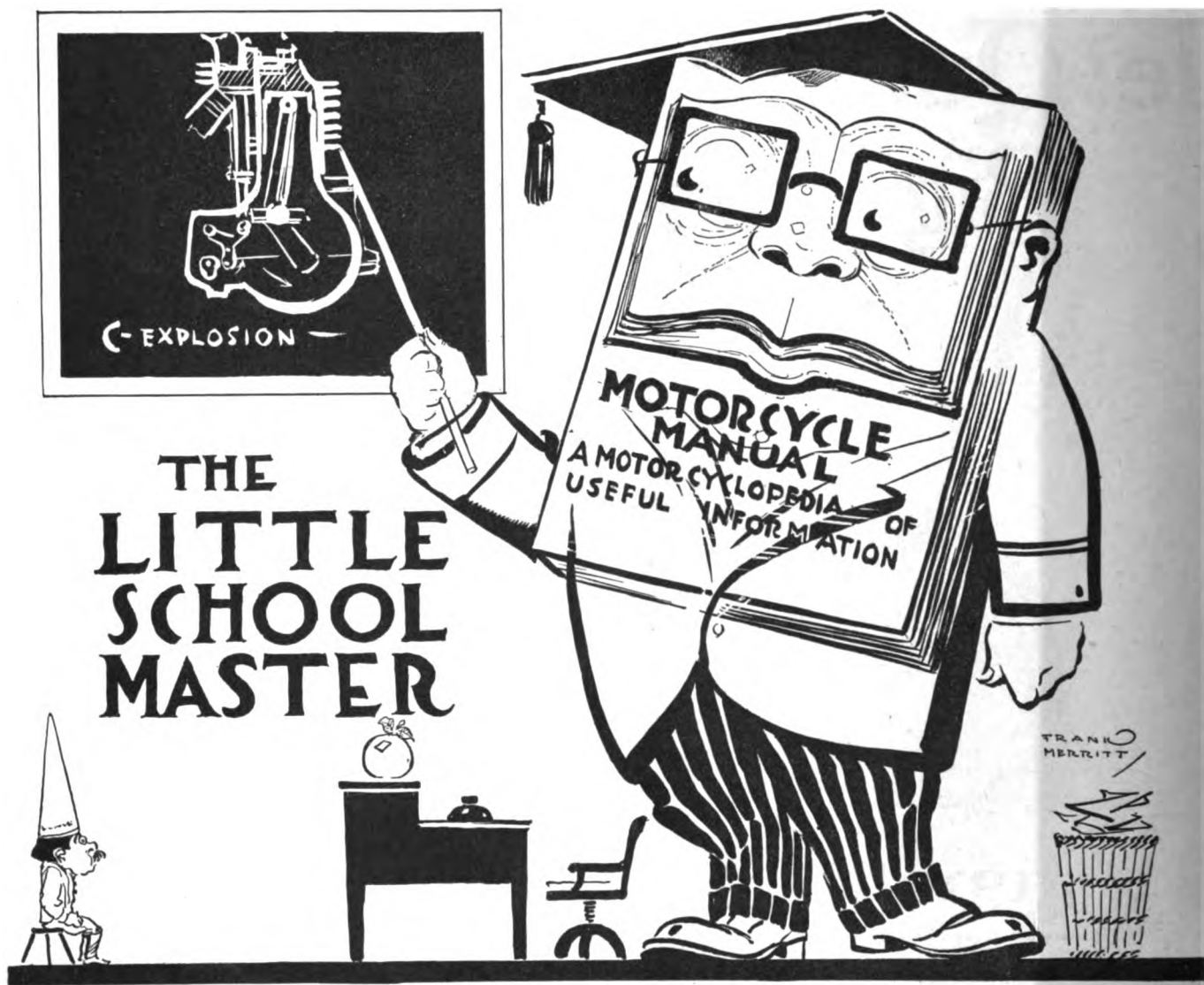
—They will go to the Yale store to seek—and buy.

Why not make that Yale store yours?

Dealers everywhere—write the Sales Manager concerning open territory. But write at once.

THE CONSOLIDATED MFG. COMPANY, 1730 Fernwood Avenue, Toledo, Ohio

Manufacturers also of Yale and Snell Bicycles, Hussey Handle Bars, Drop Forgings.



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Motorcycle engine and frame parts illustrated and fully described—their functions fully explained, with a remedy for every possible trouble.

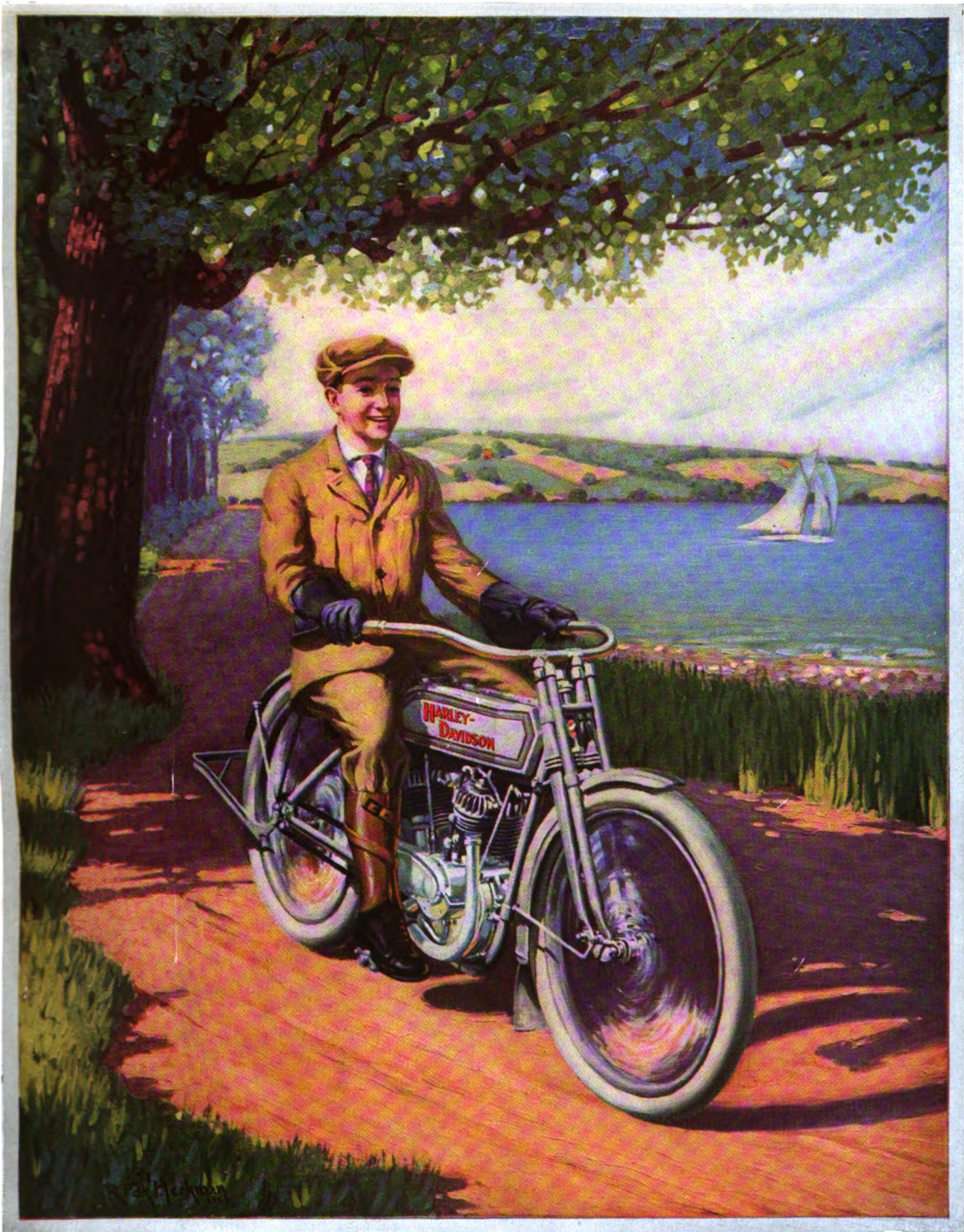
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For it also tells you how to tour; gives the motorcycle laws of every state; official racing records, hill climbing, horsepower and other formulae, and a complete directory of the motorcycle trade. Pages are magazine size, 7x9 inches.

Paper covers, 25 cents, postpaid. Cloth bound, 50 cents, postpaid. Special prices on lots of 10 or more.

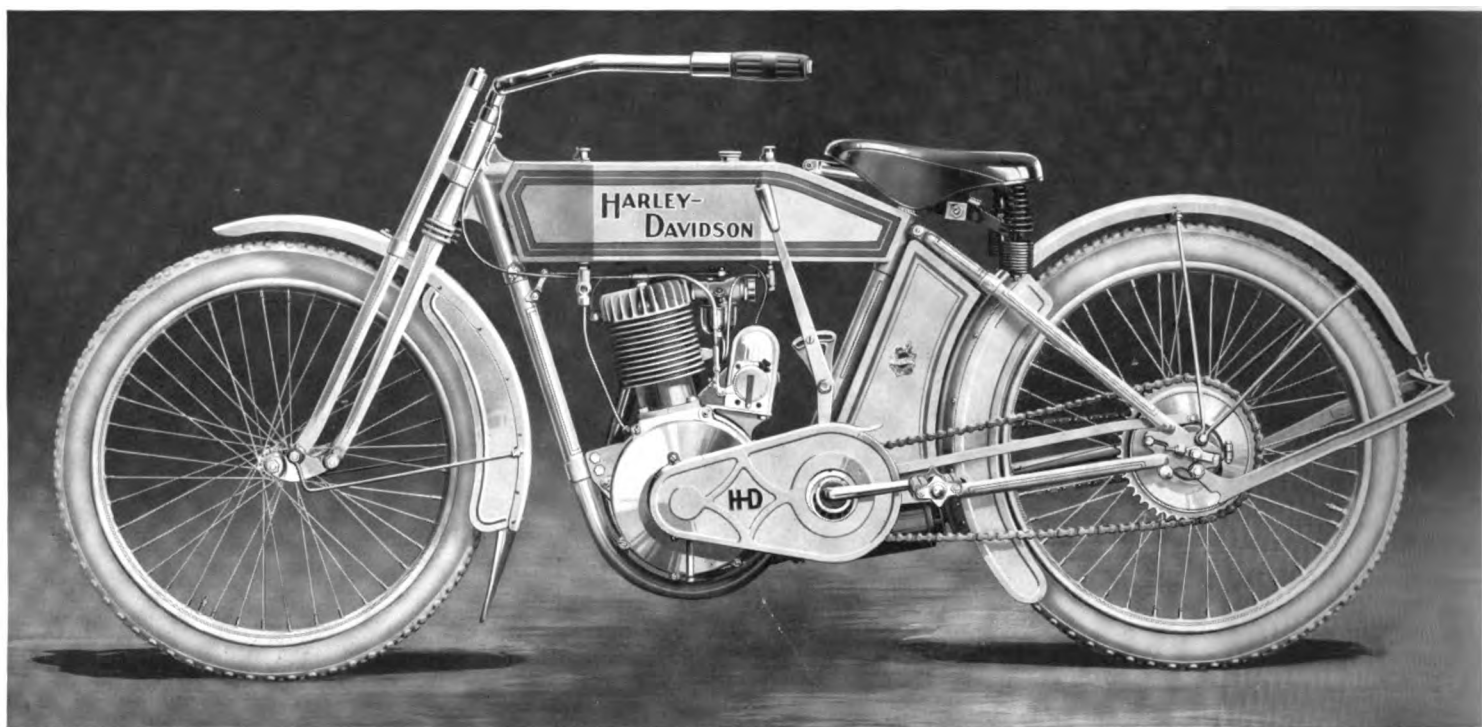
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MOTORCYCLE ILLUSTRATED, 51 Chambers Street, New York



HARLEY-DAVIDSON

The "5-35." A New A Really Successful Five H



The Harley-Davidson "5-35." Five Actual Horse Power—35 cubic Inches Piston Displacement.

TEN years ago when the Harley-Davidson Motor Company brought out their $3\frac{1}{4}$ horse power motor, other manufacturers and riders of the then popular $1\frac{1}{4}$ and $1\frac{3}{4}$ horse power type, called it a monstrosity. The monstrosity however proved to be so universally satisfactory that other manufacturers in turn were forced to manufacture motors of like size. A few years later, we brought out a still larger motor, namely our 4 horse power. This again, a second time, set a new standard for motor size.

Two years ago, this company became convinced that a still larger motor, if properly designed would render even more satisfactory service than the 4 horse power type and our designers commenced work on a new model with this idea in view. Finally a satisfactory type was evolved and built. Detail after detail was worked out until about a year ago, when our engineers became convinced that they had developed a really successful 5 horse motor.

During the past eight months this new motor, tested side by side with our 4 horse power models so firmly convinced us of its superiority that we are willing to stake our future on it, and are discontinuing the manufacture of our popular 4 horse machine.

When you consider that the Harley-Davidson Motor Company is the largest manufacturer of single cylinder motorcycles in the world, (last year building more than any other two manufacturers combined), together with the fact that the 1913 output of "5-35"

singles alone will aggregate close to two million dollars, you will appreciate the confidence we must have in the new "5-35" to devote all the energies of our greatly enlarged single cylinder department to its manufacture and to absolutely discontinue the building of the conventional 4 horse power type.

After thousands of miles of hard road work over Wisconsin's hilliest and sandiest roads—after tests of every available character—these machines had made such remarkable and consistent performances that two were entered in the Wisconsin three-day tour held August 31st, September 1st and 2nd.

This was the first appearance of the "5-35" and circumstances could not have been more ideal for another thorough test. Due to extremely wet weather this tour turned out to be one of the hardest endurance tests ever held, but both of the "5-35's" finished with perfect scores, although the test was so severe that 32 singles and 57 twins, a total of 89 out of 106 entries, failed to complete the course on schedule time.

Coming as it does from the largest manufacturer of single cylinder motorcycles in the world, the new Harley-Davidson "5-35" marks the passing of the 4 horse power type and the establishing of a new standard size for single cylinders of the future, just as the $3\frac{1}{4}$ and 4 horse power Harley-Davidsons each set the motor size standard of their time and in turn marked the passing of the undersized motors of their day.

Harley-Davidson Model 5-35 Power Motor and Why

MECHANICAL DESCRIPTION OF THE "5-35."

LONG STROKE MOTOR. Years of experience by America's and Europe's foremost automobile engineers have proven absolutely and unquestionably that the long stroke motor, as adopted for our "5-35," offers six advantages over any other type of internal combustion engine.

1st: Motor develops its rated power at a much lower crank shaft speed. (The benefits of this are at once perceived by the rider in hill climbing or in negotiating heavy roads where sand or mud is encountered).

2nd: Vibration is materially reduced insuring a more silent and longer lived motor.

3rd: It is far more economical than the short stroke motor, inasmuch as its power is developed at a lower crank shaft speed and the gearing can be higher than that of a short stroke motor.

4th: Pick Up More Rapidly. Long stroke motors are more flexible than short stroke motors and handle nicer at medium and lower speed.

5th: Will Run Slower. The long stroke motor will run slower than any other type.

6th: Easier Starting because there is more leverage on the crank shaft with which to turn motor over, and because the carburetion is better.

Exhaustive experiments in the building of the "5-35" proved to us conclusively that the common or much cheaper method of making a five, namely, increasing the cylinder capacity was undesirable. The vital parts of a larger motor should be altered to properly correspond with the increase in size, but the Harley-Davidson "5-35" is the first motor in which the designers have so changed these parts and enlarged the inlet and exhaust chambers and passages to properly accommodate the increased piston displacement.

INDEPENDENTLY OPERATED MECHANICAL VALVES. In the "5-35," we use separate cam shafts for both inlet and exhaust valves. This enables a much more accurate timing of the motor.

The inlet valve operating mechanism is in turn actuated by one of the gears in the magneto drive train. The exhaust valve mechanism remains unchanged from that which has proven so successful on the Harley-Davidson in the past. The steel formerly used for cams, and gears, has been replaced by nickel steel, thus even further increasing the life of the Harley-Davidson motor.

HEAVIER FLY WHEELS. The "5-35," being a more powerful motor, the fly wheels are necessarily made heavier than those in the former 4 H.P. type. The fly wheels, piston, and connecting rod are each machined to balance, and then assembled and again balanced as an integral unit.

CRANK SHAFT. The crank pin is now made interchangeable, both ends being taper ground and locked into the fly wheels by means of a special nut, absolutely preventing its coming out of alignment.

LIGHTER PISTONS. The piston in the "5-35" is the same size as that formerly used in the 4 H. P., but is of light construction, experiments having proven that this aids materially in the rapid acceleration of the machine from slow to high speed. This also facilitates the balancing of the rest of the moving parts.

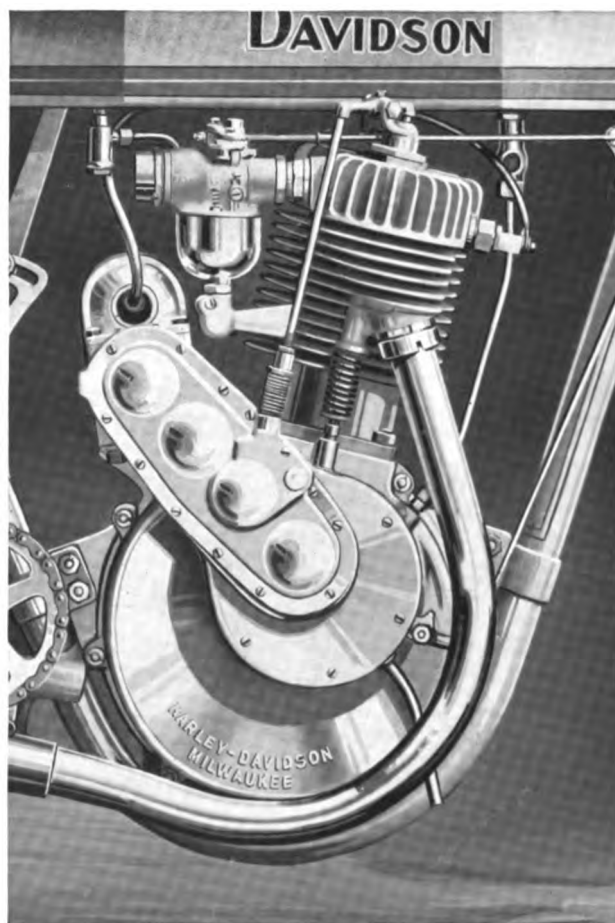
OIL POCKET IN THE EXHAUST CHAMBER. In the exhaust chamber of the "5-35," we have constructed a small oil pocket which catches the oil on the exhaust valve stem, thus preventing it from running down the stem and over the crank case. The heat of the exhaust vaporizes any small excess of oil, when it occurs and thus passes it away in the exhaust unnoticed. This refinement is far more important than it at first appears to the uninitiated.

NEW CRANK CASE PRESSURE RELIEF. A larger crank case vent has been provided. This not only helps to keep the motor cleaner, but is a decided aid in the lubrication of the motor at high speed.

LUBRICATING SYSTEM. The lubricating system in the "5-35," is the same semi-automatic vacuum feed that has been used on the Harley-Davidson in the past ten years and upon which we have still found no room for improvement, except in minor details.

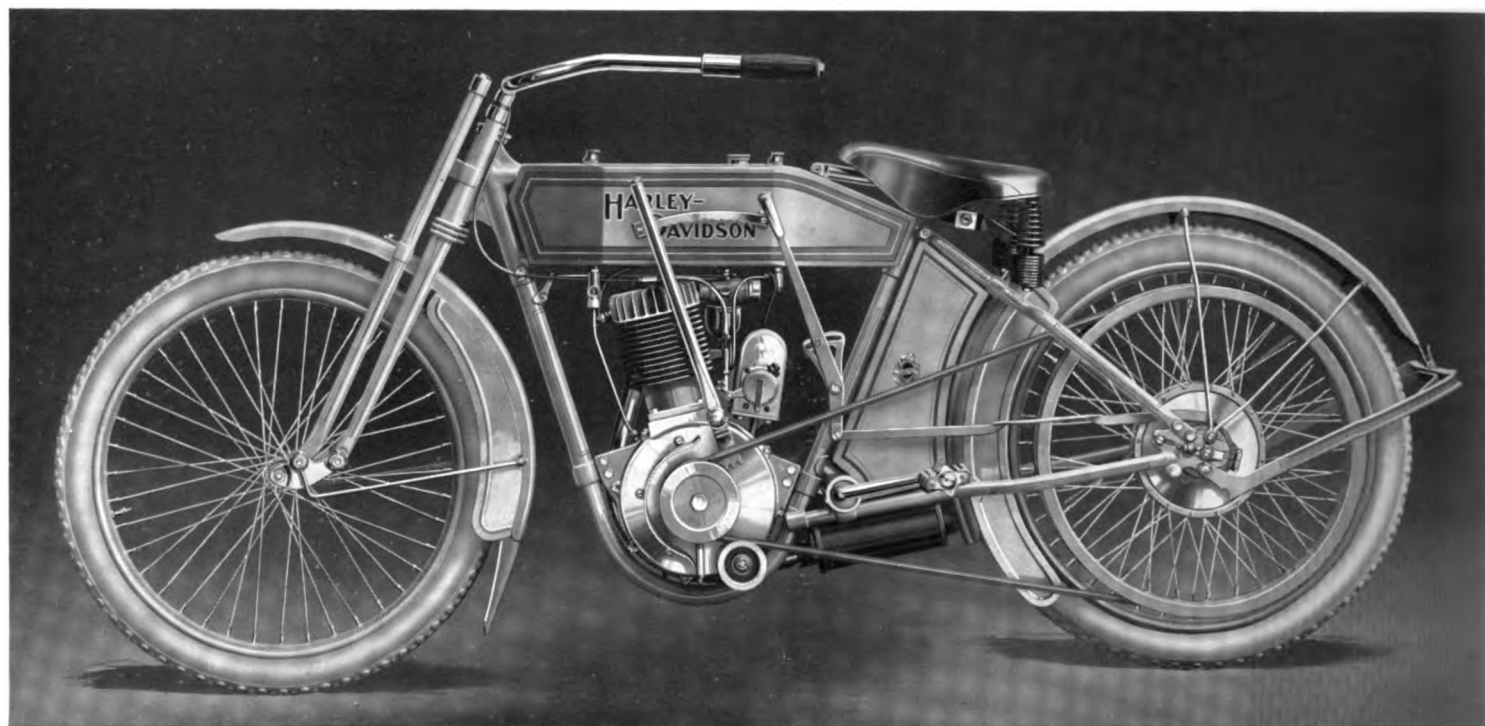
TRANSMISSION. This model can be had in either the Harley-Davidson protected belt drive or in double roller chain drive, the latter driving through a double eccentric counter-shaft and the famous Free-Wheel Control in the rear wheel. This system of chain transmission with large sprockets and Free-Wheel Control is the same as has proven so successful on our chain driven twins in the last year. A very efficient chain guard is also supplied.

BELT PROTECTOR. In front of the engine drive pulley on the belt model we have placed a curved protector which absolutely prevents mud, water and sand being thrown up onto the belt and pulley by the front wheel. This makes a marked difference in the life of the belt and we consider it a very valuable refinement.



The New "5-35" Motor.

Comparative Power Chart Proves Wonderful Flexibility and Vigor



The Harley-Davidson "5-35" Belt Drive.

GREATER pulling power at low speeds---more power on the hills---more power for mud, sand and rough roads---that has been the cry for years and that is the demand our engineers set out to satisfy when they first commenced work on the "5-35" some two years ago.

That they have accomplished what they set out to do is plainly shown by the comparative dynamometer chart reproduced on the opposite page. Nearly three times the pulling power of the famous 4 H. P. Harley-Davidson at 5 miles an hour---more than twice the power at ten miles an hour---83% more at 20---and so on. The record chart tells the story better than we can. It stands as mute evidence of the untiring work during the past two years of Wm. S. Harley and his assistants---the best engineers in the motorcycle industry.

MORE PULLING POWER. Experience with the very first 5 H. P. motors we built convinced our engineers that the automatic type of inlet valve would not do the work on the larger motors. So Mr. Harley set about to work out a mechanical valve system. The result is the simplest and at the same time the most efficient devised up to this time. By utilizing one of the gears in the magneto drive train not only were a large number of extra parts done away with but it made possible independent and consequently closer adjustment of the timing of the intake---a mighty important point on any single and doubly so for one as large as the "5-35."

VIOLENT ACCELERATION. 40 miles an hour in 16 seconds from a standing start. No other single will do this. The average twin will do but little, if any better. It took our experimental department nearly two years to develop this "quick pick-up."

"Kill all vibration" was Mr. Harley's order when he started to increase the acceleration of the "5-35." He realized that with a smooth running motor, half the work would be accomplished toward the building of a powerful, flexible, single cylinder motor. Nearly a year altogether was spent in balancing the fly wheels and reciprocating parts of the "5-35," but it was time well spent. The machine certainly did "dig" when the throttle was opened.

Then larger exhaust and intake chambers and passages were incorporated and these made a world of difference too. The entire combination worked out, almost cut in two the time of acceleration from five to thirty miles an hour.

THE "5-35" IS SPEEDY TOO. We have yet to see the 4 H. P. machine that will keep up to the new "5-35" on any kind of

es Marked Increase in Power Acceleration of the New "5-35"

Form 1852 1M

DYNAMOMETER TEST CHART

HARLEY-DAVIDSON MOTOR CO.
MILWAUKEE, WIS.

Date *8-1-21*
Operator *J. W. Harper*

Card Record *1260*
Motor No. *1260*
Motor No. *1260*

The "5-35" motor actually develops 35% more power than the 4 H. P. at 40 miles per hour.

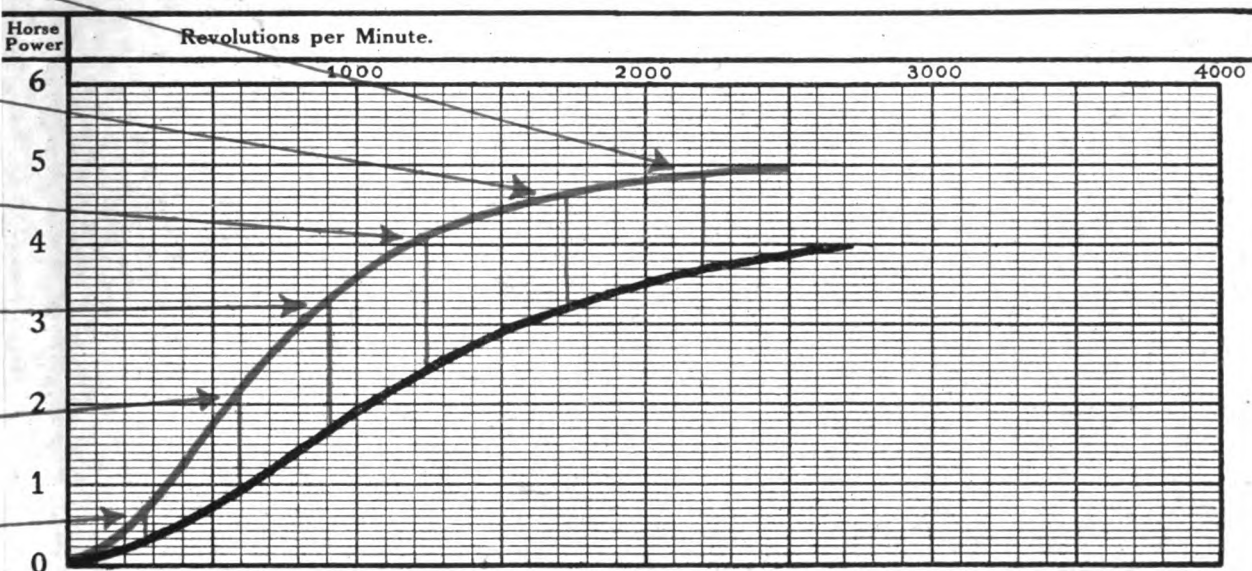
The "5-35" develops 48% more power at 30 miles per hour.

The "5-35" develops 80% more power at 20 miles per hour.

The "5-35" develops 103% more power at 15 miles per hour.

The "5-35" develops 145% more power at 10 miles per hour.

The "5-35" develops 166% more power at 5 miles per hour.



Red Line Shows Power Curve of "5-35" Motor, Black Line Shows Power Curve of the Former 4 H. P. Harley-Davidson.

road, good or bad, and when we say this it is with the full knowledge that although the 4 H. P. Harley-Davidson was not made as a racing machine it has been universally recognized as the fastest and most powerful single cylinder motorcycle on the market heretofore, and that it has repeatedly defeated twin cylinder machines of other makes of from five to seven H. P. in such important contests as the Denver-Greeley Road Race and the Milwaukee Board of Public Works police tests as well as many others.

WHAT THE ADDED POWER OF THE "5-35" WILL DO. Hills that will stall any ordinary single are nothing for the "5-35." Heavy sand and mud can be negotiated without resorting to the Free Wheel Control and without racing the motor. Think what this means, not only to the permanent life of the motor but to the comfort and convenience of the rider as well. The "5-35" motor can be slowed down to a decent riding pace without the danger of "stalling" so inevitable to the ordinary single. On the other hand, how many owners of single cylinder machines have become dissatisfied with them for no other reason than that they were sluggish? They would not pick up quickly. With the "5-35" the annoying hesitation so marked on most singles has been done away with. Careful study of the comparative chart of the "5-35" and the previous 4 H. P. Harley-Davidson is a revelation even to anyone intimately connected with the technical points of a gasoline motor.

"It handles like a twin." That is the way J. W. Harper, Harley-Davidson dealer in Miami, Florida, spoke of the new "5-35." A pretty strong statement we admit—possibly too strong. But we will put it up to the "5-35" itself to make good.

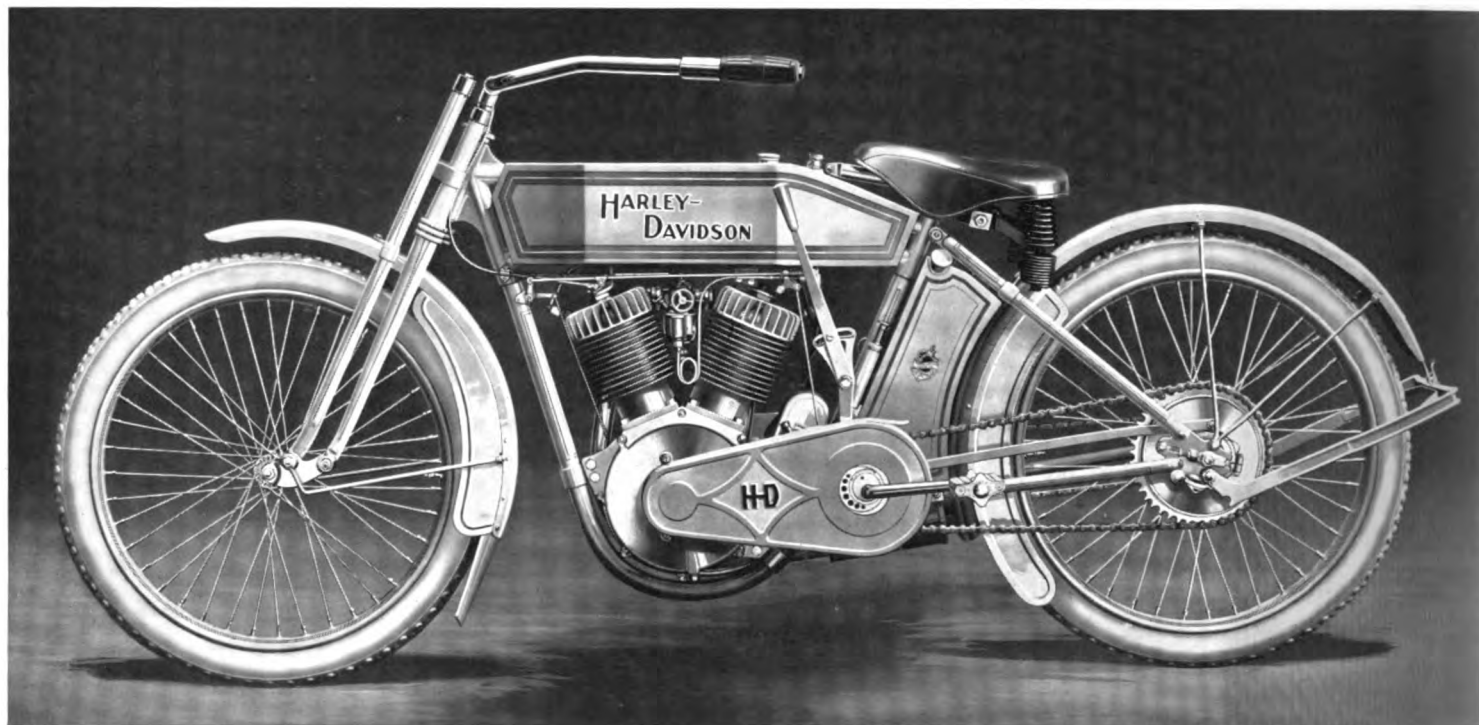
The now famous patented Ful-Floteing Seat is of course incorporated in all the latest models of the Harley-Davidson. This device, brought out by us a year ago has proven itself to be all and even more than we ever claimed it to be. Placing as it does 14" of springs between the rider and the bumps, it successfully eliminates all the jolts and jars of road vibration, so objectionable in the ordinary motorcycle.

The Ful-Floteing Seat is simplicity itself. The springs are enclosed in the frame tube and there are no projecting parts to catch on the riders' clothing. There are no small delicate parts in the Ful-Floteing Seat to break or wear out and the construction is of such a nature that side play or lost motion of any kind is a mechanical impossibility, and consequently there is no chance for the device to develop chatter or rattle.

The patented Free Wheel Control, another exclusive Harley-Davidson feature is located in the rear wheel—the only place where there is room to make the parts large enough to do the work required. Like the Ful-Floteing Seat, the Free Wheel Control has made good on more than ten thousand Harley-Davidsons and the results obtained justify every claim we ever made for it.

The Free Wheel Control has 76 square inches of contact surface and enough range of adjustment has been provided to take care of possible wear for years. With the Free-Wheel Control the Harley-Davidson may be started without the hard pedaling or the necessity for running alongside to start the motor. The mere shifting of a convenient hand lever is all that is required to operate the Free-Wheel Control.

The Latest 7-8 Horse The Most Uniformly S



The 7-8 Horse Power Harley-Davidson Twin. 60.34 Cubic Inches Piston Displacement.

THE 7 to 8 H. P. chain drive Harley-Davidson twins which we have built up to this time have been so far ahead of their time and have given such universal satisfaction that any improvements would seem almost unnecessary. Nevertheless we have not only materially increased their speed, but by a number of important refinements have made these machines even more flexible and more powerful at all speeds.

Our experience with the "5-35" having demonstrated absolutely that larger inlet and exhaust chambers and passages permitted a better charging and scavenging of the cylinder, thus making the motor more flexible, more powerful at all speeds, and considerably faster, our designers have incorporated these features in the new Twin.

The connecting rods of the front and rear cylinder are balanced not only with respect to each other, but also in relation to the pistons and fly wheels as a complete unit. Lighter pistons also aid in a quick pick up and make the machine faster. The fly wheels themselves are carefully balanced now so that it is possible to throttle this machine to an even slower pace than heretofore.

A new design of hot air intake on the carburetor has completely silenced the breathing noise which was sometimes heard when the machine was running slow and pulling hard as on hills or in heavy roads.

An auxiliary air adjustment on the intake manifold is furnished as standard equipment.

COMPRESSION RELIEF. The Exhaust Valve Release used for starting the twin cylinder Harley-Davidson proved so suc-

cessful during the past year that we cannot help but mention here the sturdy construction of this vital part. Nothing could be more annoying to a rider on a pleasure tour or at any other time for that matter, than to have the compression release go out of commission. On the Harley-Davidson the actuating part of this device is a one piece drop forging and it should outlast even the motor.

Many more refinements, which have suggested themselves as a result of a year's use of over two thousand of these machines on the road have been incorporated in the latest twin, making this motor even more quiet than before.

CRANK PIN BEARINGS. Before the appearance of the Harley-Davidson Chain Drive Twin, the connecting rod bearing in all twin motorcycles had given more or less trouble. This was undoubtedly so because of the fact that this bearing receives more service than any other part of the machine. By far the majority of twin cylinders have been equipped with bronze bearings at this point.

They were far from satisfactory however. The wear was heavy, and there being no method of adjustment it was generally necessary, in a comparatively short time, to replace these bearings. While this was often done by the dealer, and in some few cases by the owner himself, it was almost impossible for either to make a workman-like and mechanical job, the more desirable method being to forward the engine to the factory, where new bearings could be forced in with the special presses, machinery and tools necessary for this work. This feature, which was true of all twin cylinder machines was one that the Harley-Davidson Company set out to remedy.

Power Harley-Davidson factory Twin Ever Built

A series of exhaustive experiments were conducted with various types of ball bearings. While these offered the advantage of reduced friction the point thus gained was more than offset by the fact that in case of breakage, or even the chipping of one of the balls (and this occurred with prohibitive regularity) it caused the ball races to soon be chewed up and permit sufficient play in the connecting rod to permanently damage the motor. If this play was not attended to immediately there was a great likelihood of breakage of the fly wheels, crank case or even a good chance of the piston going beyond the bore of the cylinder and breaking itself or the cylinder. Obviously this type of bearing was mechanically undesirable.

After another series of extensive experiments and rigid road tests, with various types of roller bearings, our engineers evolved an entirely new type of double roller bearing, that is, two independent sets of rollers, one for each connecting rod, but both working on the same crank pin of course. This type of bearing was found to so greatly reduce the friction as to increase the speed of the machine several miles per hour. In this bearing the contact was a rolling contact instead of a sliding one, as in the case of the bronze bearings, therefore necessitating less oil to keep it properly lubricated. In comparison with ball bearings the argument was all on one side. This roller bearing in other words was a continuous bearing carrying the thrusts of the rods for the whole width of the bearing instead of confining this thrust or strain to a single point or possibly two points as was the case with the ball bearing types.

By careful hardening of the rollers and races, we found we were able to reduce wear to a minimum, giving this bearing an estimated life of nine and one-half times that of the ordinary bronze bearing. (The fact that we have used both types of bearings enabled us to make a very careful comparison.) This also permitted the added advantage of a bearing that was absolutely interchangeable. Not only this, but experience showed that what little wear did develop in these bearings after the most strenuous test, was in the rollers themselves, which rollers could be easily replaced by any rider for a few cents. These replacements of course put the bearing in perfect condition again.

Of course this double type of roller bearing, as in the case of many other refinements, has added materially to the cost of production, but the aim of this factory has never been to build a machine down to a fixed price, but rather up to the highest standard attainable.

CHAIN SIDE BEARING. All twins will hereafter be equipped with a self-aligning ball bearing (made to our order in Europe) on the drive side of the crank shaft. This was advisable, yes, even necessary, because of the peculiar strains and stresses placed upon the driving crank shaft of a twin cylinder "V" type motorcycle motor. At this point the bearing not only has to withstand the powerful thrusts of the motor impulses, but widely varying shocks and strains from the transmission due to constantly varying road and load conditions as well.

These double torsional strains of course spring the shaft temporarily out of perfect alignment which would make the bearing bind momentarily if a rigid type of bearing were used such as bronze or the ordinary type of roller or annular bearing. These strains are bound to finally cause crystallization and consequent disintegration

of the balls or rollers and races of the ordinary fixed type of bearing. Not only this, but the twisting strains being transmitted of course to the crank case and fly wheels sooner or later are liable to crystallize these parts making fracture almost a mechanical certainty. Taken altogether the self-aligning annular ball bearing used in the Harley-Davidson Twin is the only bearing that will stand up indefinitely on a twin cylinder motorcycle motor.

This type of bearing is the most expensive to be had and its installation, like that of many other refinements is only in keeping with the policy of this company, namely, the building of a machine which shall always represent the highest standard possible.

Refinements on All Models.

Larger inlet and exhaust chambers and passages facilitating better charging and scavenging of the cylinder, making for more speed and greater power and flexibility at all speeds.

Oil pocket in the exhaust chamber which catches any excess oil, preventing it from running down the exhaust valve stem and over the crank case. The heat of the exhaust vaporizes this oil as it collects, allowing it to pass away in the exhaust unnoticed.

Lighter pistons and balanced connecting rods, and fly wheels.

More clearance between mud guard and tires, allowing the use of chains on even a 3" tire if desired.

28x2 3/4" tires are regular equipment on all models.

Wider forks to correspond with increased clearance all around.

Heavier reinforcements in the front forksides.

Rocker plates on the front forks now made of nickel steel and fitted with removable hardened steel bushings to take up wear after several years of hard service. These bushings are replaceable for a few cents when worn.

A new stand catch will be appreciated by those riders who have been obliged to put up with soiled hands or gloves or spoiled shoes.

The stand itself has been materially strengthened by drop forged re-inforcements.

The operating lever for the Free Wheel Control has been put in a more convenient position.

Always aiming to make the Harley-Davidson better, we are now using a special grade of grip control wire made in Europe, to our own specifications. This wire costing considerably more than that used last year, has a tensile strength of just three and one-half times that formerly used.

On all chain drive models a double eccentric crank hanger or countershaft is used, this exclusive feature providing separate and independent adjustments for both front and rear driving chain and pedaling chain as well.

Armored Bosch magnetos are furnished on all models.

Timing gears and cams are made of nickel steel with cam and gear made in one piece.

Longer recoil springs make a more perfectly balanced action in the fork.

A concealed Yale type of lock will be a feature of the metal tool boxes this year. This is not only more convenient and safer than a padlock, but there is no separate padlock to be lost.

Harley-Davidson Policy and Prices

Years ago this firm was forced to make the decision which all progressive firms must make, sooner or later, namely, whether it was advisable to manufacture a low priced product of a corresponding quality, or a strictly high class product with the higher price which such a standard would unquestionably necessitate.

Beyond all doubt, the making of a cheap low priced product offered by far the easier road to rapid sales and a wider profit. But the mechanical ability of the practical men who form this company made them resent the idea of the manufacture of a cheap product—made them resent it, because they knew that at all times their ability would be held down by that “building to a low price” which this decision would most obviously necessitate. The cheapening of materials, hiring of inferior labor, etc., necessary when building a cheap machine, was also repulsive to them.

If they chose the other path, namely the building of a product to the highest standard attainable, they knew that the price they would be forced to ask would hinder sales until the real worth of their product had been proven by actual use over and over again all over this country. They believed however that the American Public would gladly, yes, willingly, pay for quality, if the quality claimed was really there.

The question was threshed out pro and con over and over again. Finally a decision was reached and this firm adopted a policy from which it has never deviated in the slightest degree, namely the resolve to build the best machine that money and ability could turn out. It was really not until 1911 that this firm really profited by this resolve for up until then the demand for motorcycles was so large and the supply so small that almost any kind of machine could be disposed of.

Unquestionably, every motorcycle dealer will remember the time when all motorcycles sold at a standard or fixed price, but in 1911 the supply caught up with the demand and for the first time it was not a question on the part of the purchaser of taking what he could get deliveries on, but a question of what machine offered the most value for the money.

Apparently the public had begun to realize and appreciate the real value of the Harley-Davidson, for while this firm was away oversold and unable to fill all their orders several firms finished the year with a stock of machines on hand which they were compelled to carry over into 1912 as you will recall. The day of inflated prices and over-demand had passed. With abundant supply, the purchaser was able to select the machine he preferred.

In 1912 we again brought out new models. As you will remember these new models incorporated the Ful-Floteing Seat and Free Wheel Control, and were, without question, the greatest values ever offered to the public for the money. When we made our announcement to the trade, many other manufacturers seeing at once the impossibility of competing with the product we offered at the same price, announced cuts in prices, some firms making two distinct announcements, one before and one after the Harley-Davidson announcement.

In spite of the fact that our price was by far higher in 1912 than that of many other manufacturers we sold our entire output and could have disposed of more machines had we had them. While the price was higher, the value was there and the public appreciated it.

Understand, we are not in any way reflecting on the host of manufacturers who are today building a cheap machine. We do not believe a single one is making more than a legitimate profit. Some less, and we honestly believe every purchaser of these machines received all that the low purchase price really entitled him to.

Unfortunately, however, some of these buyers were led to believe that the lower price entitled them to Harley-Davidson quality. They forgot that higher quality always necessitates a higher price.

In spite of the many improvements and refinements we are incorporating in our new models this year, our greatly increased capacity (100%) will enable us to market our improved machines without any advance in price, and we honestly believe that this new model will render even firmer the leadership the Harley-Davidson has attained in the motorcycle industry, and which has caused the public to name it “The Packard of Motorcycles.”

Model 9-A	“5-35” Motor, 5 actual horse power, 35 cubic inches piston displacement, protected belt transmission, driving through Free Wheel Control. Price	\$235
Model 9-B	“5-35” Motor, 5 actual horse power, 35 cubic inches piston displacement, roller chain transmission, driving through Free Wheel Control. Price	\$235
Model 9-E	7 to 8 Horse power twin cylinder, 60.34 cubic inches piston displacement, roller chain transmission only, driving through Free Wheel Control. Price	\$285

Magneto Ignition, Ful-Floteing Seat and Free-Wheel Control Are Standard on All Models.

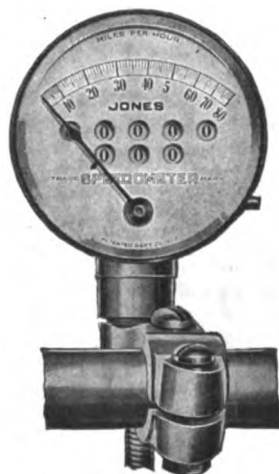
HARLEY-DAVIDSON MOTOR COMPANY
285 C STREET MILWAUKEE, WIS.

Get Added Pleasure And Efficiency From Your Machine

Practically every automobile carries a speedometer. Why? Because the driver wants to know his speed, how far he's travelled, if his car is used without his permission and—it helps him to find his way over unknown roads and prevents unauthorized arrest for overspeeding.

FOR THESE SAME REASONS—you, Mr. Motorcyclist, should use a

JONES SPEEDOMETER



Absolutely accurate. Gives trip and season mileage. Tells your speed at all times. Makes riding a pleasure. Is reasonable in price. Quickly and easily attached to any machine. Write for particulars or get one from the supply man. JONES is the best of *all* speedometers, Winner of the Gold Medal and absolutely Geared To The Truth! Get yours today.

THE JONES SPEEDOMETER

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Perfect Score With Continental-Erie Tires

CAMBRIDGE, Mass., October 9, 1912.
Continental Rubber Works, Erie, Pa.

GENTLEMEN: I beg to advise you that I entered the Nine Hour run held by the Providence Motorcycle Club with my machine equipped with Side Car. Both the machine and Side Car were equipped with Continental-Erie Motorcycle Tires, and I finished with a perfect score. I am pleased to advise you that these Tires show but very little sign of wear, and I consider this remarkable, in view of the fact that I have been using these same Tires for the past two months throughout New England, testing out our Side Car, and Tires are standing up remarkably well under the hard usage.

You have an excellent tread stock on these and I am very well pleased with the Tires of your make that we have used thus far.

Yours very truly,
BAXTER SIDE CAR CO.,
(Signed) James Baxter.

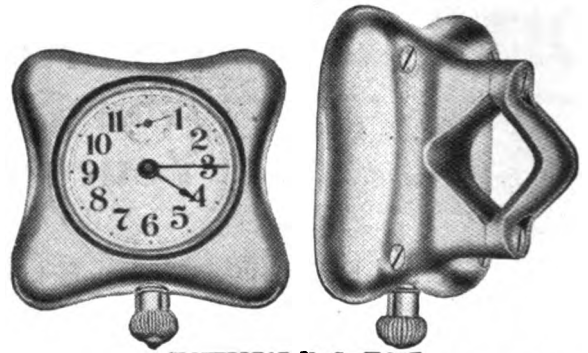


Continental
Rubber
Works

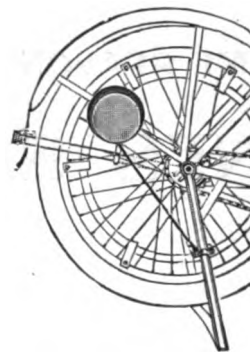
Erie, Pa.



Motorcycle Supplies



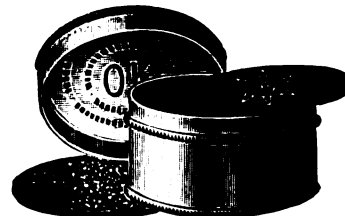
OLIVERKELLY M. O. OLOOK
movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$3.50.



MOTORCYCLE STAND LIFT
avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
List, Each \$4.50.



SPARK PLUG UMBRELLA
should be used on all exposed engines where water is likely to come in contact with plug and cause short circuit.
List, Each .50.



"G" PATCH ASSORTMENT
contains 10 Ready-to-Use Patches, which require no cement. Patches are 1 1/2 inch—just right for punctures. Contained in air tight brass box moisture and rust proof.
List, Each .60.



O. E. JUNIOR TIRE TALC.
Handsome lithographed silver top metal can, with friction bottom, which can be opened when empty for refilling. Measures 1 1/2 by 5 inches. Best quality talc. Highest grade package for purpose ever put out.
List, Each 10.



EAST INDIAN MICA PLUG,
made of best East India mica. Lateral winding instead of mica washers. Best motorcycle plug made.
List, Each 75



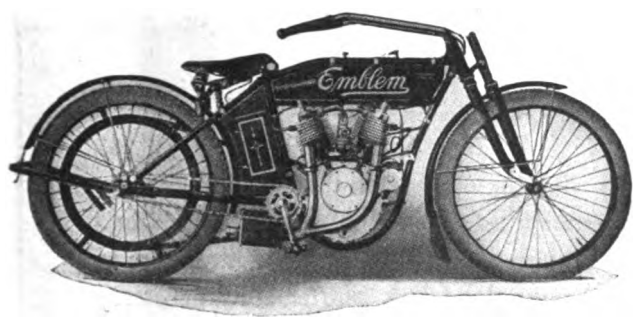
5 INCH MOTORCYCLE FLIER.
High Grade. Finely nickel plated.
List, Per Pair, .50.

WHOLESALE ONLY.
Order through your dealer. Positively no correspondence or orders handled in any other way. Dealers, ask for 500 page catalog of motor and cycle material. Most complete line ever shown.

THE BECKLEY-RALSTON CO.

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EMBLEM MEANS EFFICIENCY AND ENDURANCE

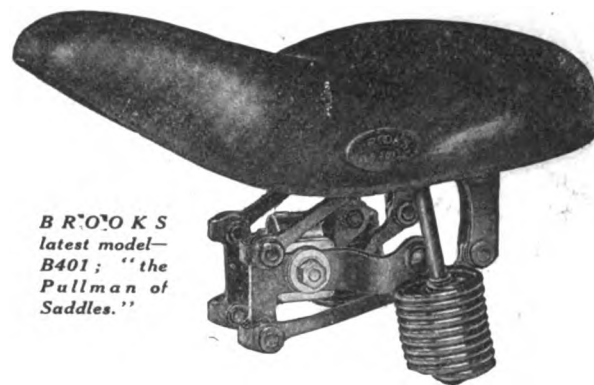
After all, when all's said and done, a motorcycle which contains, in the largest measure, these two qualifications—efficiency and endurance—can cope successfully with machines which are bedecked and upholstered with various (so-called) comfort-insuring devices, but which fall woefully short in point of **plain, every-day service.** That's where

The Emblem "The Eager Motorcycle"

excels. Hasn't it struck you as significant that whenever tours of unusual length are planned—and successfully accomplished—it is always the Emblem that figures prominently?

Learn more about the **Emblem.**

EMBLEM MFG. CO.
ANGOLA, ERIE CO., N. Y.



B R O O K S
latest model—
B401; "the
Pullman of
Saddles."

Choose that Saddle—

choose any other model which bears the name of **BROOKS**, and—

You will ensure perfect comfort—perfect pleasure.

We make that statement with every confidence—we make the saddle and,—we know its merits, and to you we say—

That test—actual test upon the road—will reveal, better than any argument we can put forward here, the absolute superiority of the

BROOKS—
the original and only
genuine Compound-
spring Saddle—

Will you make that test?

Will you choose that saddle?

Do so, and ensure "true luxury a'wheel."

J. B. BROOKS & CO., Ltd.
75 Criterion Wks, Birmingham, Eng.

Distributing Agents for U. S. A.: **The D. P. HARRIS HARDWARE CO.,**
48 Warren Street, New York



Patent
applied
for

Clark Motorcycle Starter

A NEAT and compact attachment for the carbureter, that starts the engine without excessive pedaling, reduces carbureter trouble fifty per cent and cuts down the gasoline bill. A gasoline engine requires a richer mixture to start on than is needed after it is warmed up. Without the Clark Starter, it is necessary to open the needle valve more than is required to give efficient results after the engine is warmed up. [Price, 75c. each]

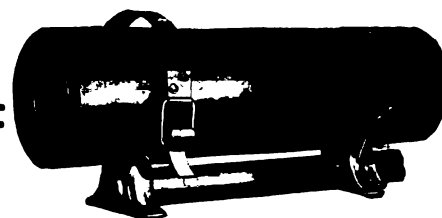
Clark Acetylene Tank Brackets

For attaching tank to top cross bar of motorcycle frame. These brackets are fastened to the cross bar in a very rigid manner and have a flaring base which rests lightly on the gasoline tank. This base prevents the tank from jarring loose on the roughest roads. To install brackets merely set in desired position and tighten one set screw in each bracket with a screw driver. Guaranteed to hold tank in perfectly rigid position. [Price, highly polished nickel plate, \$1.50 per pair]

W. F. CLARK MFG. CO.

3551 W. 23rd STREET

CHICAGO, ILL.



For a long time the motorcycle trade has demanded a better motorcycle motor. We have met this demand with our

ATTENTION

Motorcycle Manufacturers

**Silent
Fast**

**Powerful
Clean**

DeLuxe Motors

and the trade knows it. Are you prepared to supply **YOUR** trade with motorcycles equipped with our famous motor?

THE F. W. SPACKE MACHINE CO., Indianapolis, Ind., U. S. A.

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HERZ PLUG

"Bougie Mercedes"

is altogether different from ordinary Plugs. Its superiority is "built in"—perfectly apparent in *every* detail of materials and construction. That is why HERZ PLUGS can be

GUARANTEED A FULL YEAR

The stone insulation does away with cheap, cracking porcelain. The electrode will not burn away. The four sparking points ensure a hot spark every time.

HERZ PLUGS can be relied upon under all sorts of conditions. Use HERZ MAGNETO with HERZ PLUGS—the ideal ignition system.

Self-Cleaning

Motorcycle
Type

\$1²⁵

Double-Stone

Four
Sparking Points



Platinum-Alloy
Electrode

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Speed vs. Safety

"Faster! Faster! Faster!" comes the cry of the speed maniac on every hand, while day after day the Grim Reaper collects his toll of lives needlessly sacrificed in the frantic effort to excel. *And all for what?* Surely the fact that a high powered motorcycle can go around a steep saucer at tremendous speed does not help in any way to impress the onlooker with the desirability of motorcycle riding, its safety, its comfort and its manifold other attractions. And the speedster on the road, who ignores city and town ordinances, crashing through sleeping villages at night at a fifty-mile clip with his muffler wide open, or whizzing through populous towns with speed unabated, leaving behind him a wake thickly strewn with startled pedestrians, horses rearing in blind terror, frightened children and a general atmosphere of antipathy and consternation; such a person does more to bring the motorcycle into disrepute than can be counteracted by thousands of dollars spent in promoting favorable publicity.

Not to be overlooked among the causes of accidents due to speeding is the fact that the usual transmission employed in speed contests is of such an uncompromising character as to inevitably cause disaster, if such transmission were to go wrong in the slightest way. When a high-powered machine is coupled with a rigid, inflexible, yet inadequate chain transmission and such a machine is turned loose in crowded traffic, bestrode by an inexperienced rider, that machine becomes a menace to the public safety and does in no way aid in popularizing the two-wheeler.

The Graton & Knight Manufacturing Company wish to announce that beginning with the succeeding number of this publication they will inaugurate a series of "Belt Talks". These talks will have as their object the exposition of

the belt drive as the only sensible, practical and logical form of transmission. They will endeavor to explain fully and beyond the possibility of misunderstanding the reason for the enormous popularity of the belt as a flexible and at the same time tremendously strong and efficient mode of transmission. They will aim to instill into the minds of the American motorcycle riders, the undeniable superiority of the Spartan belt drive.

As a rule, the English are a slow race to adopt anything. Cautiousness and conservatism are their prevailing traits. Therefore, it is a very significant truth that no other form of motorcycle transmission has a "look-in" in England, other than the belt. They have proven beyond peradventure of a doubt that the belt transmits *all the power necessary*, even for sidecar riding, for which strain no belt has yet been specially prepared, but which the belt has nobly proven its power to withstand.

It is not our purpose to disparage the various other forms of transmission now in vogue in America, but merely to *PROVE* conclusively that the belt is capable of furnishing *all* the speed necessary and desirable to any one other than a *speed fanatic*, (which class is fortunately in the minority), and at the same time excels all others in consistency of performance and all-around wearing qualities.

To these "G & K Belt Talks" we solicit your careful attention.

Graton & Knight Manufacturing Co.

WORCESTER, MASS.

MAKERS OF THE FAMOUS

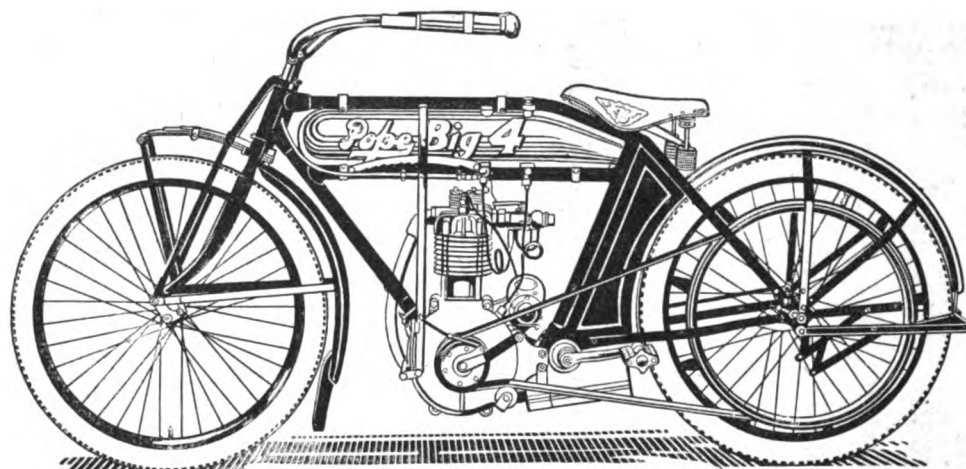
SPARTAN BELTS

Used by 80% of the manufacturers of belt-driven motorcycles

The New
"Big 4" Model K
\$200

POPE

The
Popular Model H
\$165



Pope "Big 4" Model K, with Magneto, Free Engine Clutch and Idler, \$200

The Advance Agents of Prosperity

POPE salesmen are now busy signing up dealers throughout the North, South, East and West for a season of unparalleled prosperity in the motorcycle business.

When one of our representatives calls at your place of business, as he will shortly if he has not done so already, remember this; that he is not alone a motorcycle salesman, but that he is the **ADVANCE AGENT OF PROSPERITY**.

As an expert in his line, he is qualified to speak with authority regarding the prospects for 1913 business. The burden of his message will be—"a greater year for the motorcycle trade in general; and an overwhelming demand for Pope Motorcycles in particular."

Give him your order and you, too, will be booked for a season of greater prosperity. At any rate, don't close for 1913 until you have learned our proposition—either through our representative or by mail.

Write us today for particulars

The Pope Manufacturing Co., Hartford, Conn.

PACIFIC COAST DISTRIBUTORS

F. P. KEENAN CO.

KIMBALL-UPSON CO.

Portland, Ore NORTHWEST Sacramento . . . NORTHERN CALIFORNIA AND NEVADA

C. L. SMITH

Los Angeles SOUTHERN CALIFORNIA

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Fits
Every
Motorcycle

Increase Power

Speedo

IT'S GUARANTEED

TEAR THIS OUT
If my dealer hasn't Motorcycle SPEEDO, I will state whether for single or twin. Amount \$2.00 prepaid. Refunded if I am not pleased. Fulton-McCutchan Co., Chicago, Ill. 1151 Michigan Ave.

YOU will never know how perfectly your Motorcycle can run until you try SPEEDO.

It is as essential as the carbureter. Thousands already in use. Attached in five minutes on intake manifold. Breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. Automatically gives just the proper additional air your running speeds require. Passes you by the other fellow. Pulls you through sand and mud. Sails you over the hills. Small enough to be out of the way. Big enough to work wonders.



"It's the SPRAY That Does It."

Absolutely Guaranteed:

1. To Increase Power 20%
2. To Save 20% Gasoline
3. To Remedy Carbonization
4. To Keep Engine Cooler

Price \$2.00 Including Decarbonizer

Your money is refunded if you are not pleased. No dealer is authorized to sell otherwise.

See any Dealer, or Write

REMEMBER YOURSELF TO ORDER TODAY

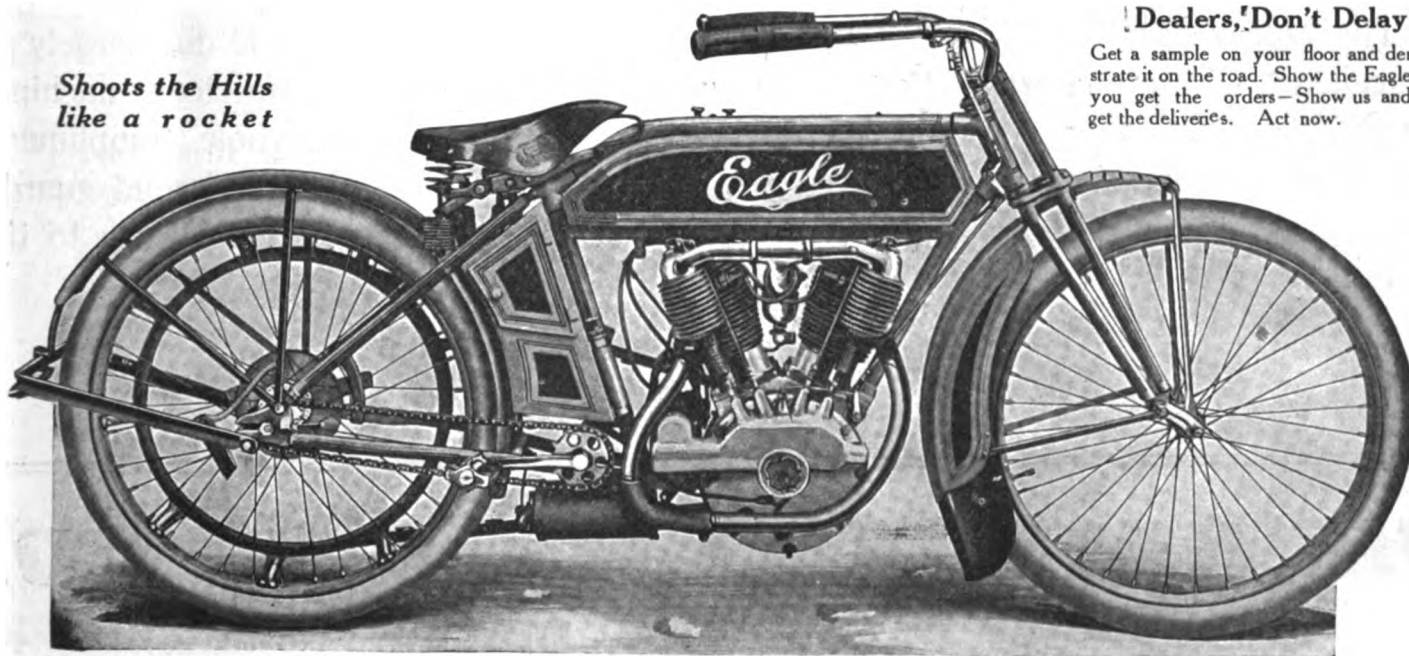
FULTON-McCUTCHAN CO., Distributors, 1151 Michigan Avenue, CHICAGO

**The Great
American**

Eagle

Not one criticism of any kind was the verdict of over 3000 motorcycle riders who visited our exhibit at the big Brockton Fair and examined the Eagle. All were loud in their praises of the machine. As straws show which way the wind blows, this is an indication of the trend of buyers for 1913.

*Shoots the Hills
like a rocket*



Dealers, Don't Delay

Get a sample on your floor and demonstrate it on the road. Show the Eagle and you get the orders—Show us and you get the deliveries. Act now.

AMERICAN MOTOR CO.
718 Centre St. Brockton, Mass.

DISTRIBUTORS:
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CALIFORNIA MOTORCYCLE CO., 818 S. Main St., Los Angeles

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WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubos, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

OFFICES IN

NEW YORK

CHICAGO

DETROIT

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Others May Juggle With Figures

But the indisputable fact remains that the



made positively the best showing in the gruelling Ohio State Fair Endurance Run, October 11, 12 and 13.

Three Merkels (Taylor, Dewley, Sanford) started, and all three finished.

Other makes outnumbered the Merkel three to one, but none made as good a showing.

Not one of the Flying Merkel riders experienced the slightest mechanical trouble of any sort. Each of the machines used already had covered many thousands of miles previous to entering the gruelling contest.

We are signing nineteen-thirteen contracts; better wire for territory.

WRITE TO-DAY FOR CATALOG B.



California Distributors	The Appeal Mfg. & Jobbing Co., Los Angeles.
Oregon & Western Washington.....	West Coast Supply Co., Portland, Ore.
Eastern Washington, Idaho & Montana.....	Spokane Cycle & Supply Co., Spokane, Wash.
Colorado & Wyoming.....	C. W. Brown, Denver, Colo.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Do You Want to be SHOWN? Here is PROOF of the Worth of the

SCHICKEL VALVELESS TWO-STROKE MOTORCYCLE

During the past year, Mr. Reader, we have shown you just what the Schickel Motorcycle is. We have shown you the beautiful and graceful lines in the complete machine. We have taken you through our series of feature talks, and shown you its every detail, and now we are showing you what Schickel dealers and Schickel riders everywhere in the United States, from Seattle, Washington, to Canal Zone, Panama, have to say about this, "The Master Motorcycle."

The following are extracts from letters we have received:—

I must give you a few words of praise concerning your machine. I have ridden it about three hundred miles and must say that it is still picking up speed and power. I trimmed up several machines that went out with me. I beat them both on hills and on the level. Your machine certainly is a sticker when it comes to a hard pull. She will out-pull any four-cycle that I have contested with so far.

SCHRODER, WODTKE & CO.,
Per J. H. Schroder.
Minneapolis, Minn.

Sept. 13th, 1912.

I have received the "Schickel" No. 121 delivered to Capt. Mowbray, given same a good try out, and will say that I am thoroughly pleased with what the motor can deliver and the strong scientific lines of construction. I believe it will prove a "Master Motorcycle."

May 15th, 1912.

C. E. GILMORE,
Empire, Canal Zone.

The machine is having constant use, as a great many are in doubt about the motor and do not think it will "hold out," so I want to "show them." The machine is so simple that I have a hard time trying to convince the experienced riders that it is true.

March 15th, 1912.

LOUIS SCHOENE,
Evansville, Ind.

I didn't have a minute's trouble with the engine, and of all the unfavorable road and weather conditions you never saw the like. I had one bad fall while coasting down a hill with the engine running free and the brake almost locked. I got a bad cut below my eye from my goggles. This happened 4 miles west of Brazil, Ind., between Terre Haute and Indianapolis, and the farther I went the worse the roads got, and the motor showed up beautifully through sand and on hills.

I always found a curious crowd of dealers and riders anxious to see the machine and hear it run.

Can't say too much in praise of the fork and frame construction, as my machine has gone through an awful test and is very little worse for the experience. Had it not been for the strength of those forks I probably would have been killed by some of the ruts that I hit on strange roads and at good speed.

Evansville, Ind.

ELMER E. DEAR.

Demonstrator received. Have tried the machine and find that it runs good. I like to hear it hum.

I have invested in several other machines, but as soon as I can dispose of those on hand I will sell the Schickel exclusively, provided I can get them when ordered.

Enclosed find twenty-five (\$25) dollars deposit on machine number two, which I hope you will send as soon as possible.

June 18th, 1912.

E. P. BAUCH,
Blue Island, Ill.

Very recently I purchased one of your machines and am very much pleased with it. If it is not too much trouble would you be so kind as to send me a book of instructions and the exact proportion of oil to use.

Yesterday the machine was taken through a ford which entirely submerged the crankcase and it never missed a stroke. A speed of fifteen miles was required to get over.

Aug. 26th, 1912.

WM. A. SCOTT,
Washington, D. C.

Your Schickel machine has a pretty running motor and I am much pleased with the appearance of it.

Aug. 7th, 1912.

C. B. COTTEN,
Salt Lake City, Utah.

Now, to tell you the truth, I like the Schickel better than any motorcycle I ever rode and I have had a lot of them. It has them all beat on hills and runs so smooth and nice.

L. M. GRAY,
Greenville, S. C.

Oct. 4th, 1912.

The motor is a little stiff in its joints yet, but believe me it certainly runs nice. I have made some very steep hills with ease, but I did not use half enough cylinder oil on the start, but did not run it but about a half mile so there was no harm done to the engine.

This is the first motorcycle that I ever owned or rode and have had no trouble in the riding or driving of the machine, and think that I have made the grandest choice of machine on the market today. It is not only me that thinks that way, but nearly all the people that have seen me riding. Both old and young wonder how I ever run across a machine like that. They never heard of the name Schickel before.

JOHN E. McLEOD,
Washington, Kans.

Aug. 10th, 1912.

Mr. — rode a twin — with me up to within six miles of Great Falls, Va.-Md., and there he had to give up as his machine stalled on the hills, stalled in the sand, which was from 8 to 12 inches in depth; he stalled in the heavy cracked stone that was just put down on that road, which was very hard going, and he had trouble from the start. The Schickel behaved much better; there was not a hill that it stalled on, there was not a time when I was compelled to get off and push it thru sand or the heavy cracked stone, as the machine is the easiest machine I have ever ridden in sand or in any place where it was hard to steer, and over the whole route of about thirty miles I did not have the slightest difficulty with the machine—the spark plug was clean, nor was there any soot to be found anywhere in the cylinder.

JOHN L. HINES,
Washington, D. C.

July 13th, 1912.

We received the Demonstrator, Monday 26th, and as far as appearance is concerned, the machine is first class. We have not had the opportunity to give the machine a thorough test on account of the severe weather and bad roads; but the tests we were able to give proved more than we expected. We really are surprised at the simplicity, power and beautiful appearance of the machine. The arrival and a few demonstrations of the machine have taken the whole city by storm, and all motorcyclists and others are highly elated over the simplicity and quietness of the motor. It is the talk of the town, and we intend to keep it so, by devoting all our time and energy to the sale and advertising of the Schickel Valveless Two-Stroke Motorcycle.

ERIE MOTOR SALES CO.,
Erie, Pa.

Aug. 28th, 1912.

A lot of the fellows have got twin cylinder machines, and believe me I have shown them something with my demonstrator. I have got a number of the fellows interested in your machine, and they said, "Me for a Schickel after this."

I think it is the neatest and prettiest machine on the market today. Everybody that has seen it and heard it running say they can't get over the quiet purring of that two-cycle engine.

PAUL NEWMAN,
Cleveland Hgts., Ohio.

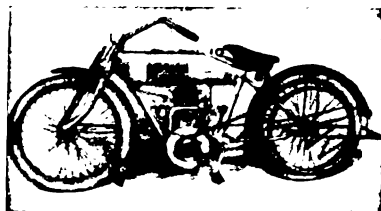
June 29th, 1912.

I have given the machine some good road tests and it has gone over some extremely hilly and rough roads, covering about one thousand miles. It has proven to be a good hill climber.

How soon will the factory be able to make 1913 delivery? How many machines could be delivered to me in how long a time?

G. F. GOODING,
Seattle, Wash.

Sept. 30th, 1912.



The Master Motorcycle

Now, Mr. Dealer, ask yourself the question: Is this the kind of a machine you want to handle for 1913? If it is you should act at once. Daily we receive quantities of applications for territory for the coming year, and have already closed contracts for a large number of machines.

NOW IS THE TIME

The Schickel Motor Company 59 Garden Street, Stamford, Conn.



AROUND THE CLOCK WITH THE SPEED KINGS.

1 Constant. 2 Seymour. 3 Armstrong. 4 Chapple. 5 Balke. 6 Clafin. 7 Klark.
8 Graves. 9 Ward. 10 Wolters. 11 Matthews. 12 De Rosier. Photographs furnished
by the Goodyear Tire & Rubber Company.

FRANK

MERRITT

A few tire facts for motorcyclists

FOR years, eighty per cent. of all motorcycle riders in America depended upon Morgan & Wright and G & J tires for their riding equipment. These tires were manufactured in separate factories.

Old campaigners in the motorcycle field will bear us out in the statement that they stood at the top of the list.

With the resources of but one factory to draw upon each brand was the *best* that could be produced at that time.

Up to two years ago there was no basis for judging quality standards in tire construction except on results obtained from tires built thru single-factory methods of manufacture. The idea of combining the

strongest and most desirable individual features of two leading brands of tires and producing *one superior brand* had not been conceived.

But this is precisely what the United States Tire Company has done.

United States Motorcycle Tires combine every element of strength and every effective service-yielding feature of the two brands of tires which formerly satisfied eighty per cent. of all the riders in America.

Tire users no longer are required to accept the character of service they formerly received from single-factory tires. The exceptional strength,

the resiliency, the toughness the all-around dependability of United States Motorcycle Tires belong exclusively to tires made as these tires are made.

UNITED STATES TIRE COMPANY
NEW YORK

Dealers Everywhere



OCTOBER 17, 1912

SPECIAL SESSION OF F. A. M. DIRECTORS

Track Franchise Policy and Other Matters Will Be Acted Upon at Indianapolis Meeting on November 3.

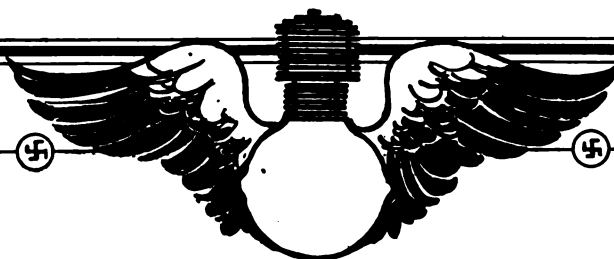
DURING the last few weeks F. A. M. matters of special import have developed so rapidly that the members of the Board of Directors have been literally bombarded with communications, but even voluminous correspondence has not disposed of all the business demanding immediate attention, and it is likely that an extra meeting of the directors will be held in Indianapolis on Sunday, November 3. A vote of the directorate is now being taken to ascertain the sentiment of the board relative to such a session, and there is every indication that the members will be unanimous in their approval of the plan. Some of the most important questions to be taken up concern the Competition Committee, which has been considerably hampered recently owing to the fact that its policy on certain points has not been defined with sufficient clearness to permit of prompt action by the chairman.

On more than one occasion of late telegraph wires have been kept hot and dozens of letters have been exchanged in an effort to handle without delay some question arising from an application for a restrictive board track franchise, and one of the objects of the proposed special meeting will be to minimize red tape and define the F. A. M. policy on these matters so that, barring extraor-

dinary developments, they may be disposed of at once by the chairman of the Competition Committee. The board track situation has never afforded such food for serious thought as at present, and it is with a view of making the most of its opportunities that the F. A. M. looks forward to simplifying the work of its competition chairman.

The New Orleans racing horizon has been cleared by the announcement that M. F. Bramley, of Cleveland, has been granted a restrictive franchise for a board track in that city, as well as for tracks in Cincinnati, Kansas City and Detroit. Action on these applications has been pending while F. A. M. officers investigated the confusing situation at New Orleans, and the present decision is regarded as entirely satisfactory. All the Bramley applications have now been disposed of, and the promoter will rush his plans.

With reference to the application of S. G. Arthur, for restrictive franchises in San Antonio, Tex.; Atlanta, Ga.; Birmingham, Ala., and Havana, the Federation Board of Directors will proceed with caution, an intimation that Arthur and his associates would undertake the operation of an outlaw track in Dallas, Tex., if they were not granted restrictive privileges, having created an unfavorable impression in official circles.



HARLEY-DAVIDSON SINGLE IS 1913 FEATURE

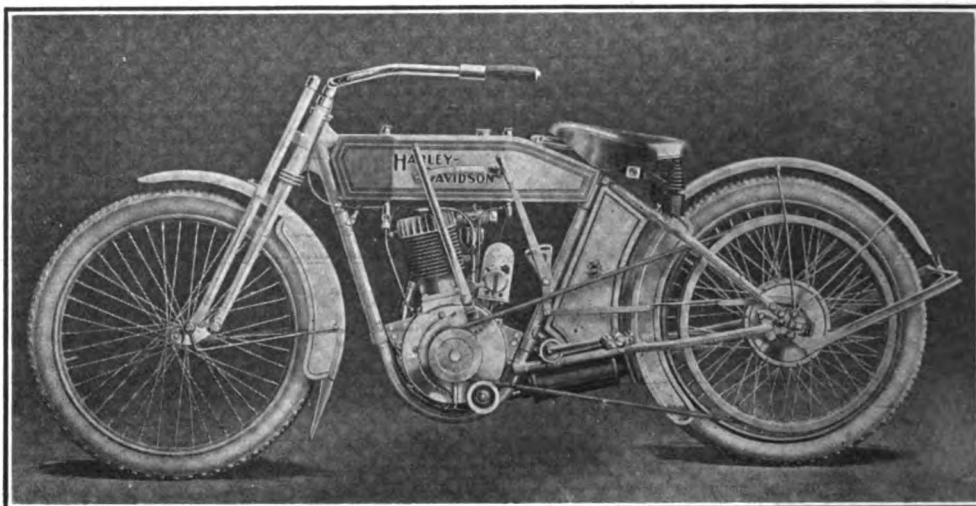
Big 35 Cubic Inch Motor, Developing 5 Horsepower, is the Solution of the "5-35" Mystery—Motor and Machine Refinements Galore—The Chain-Driven Twin Completes Line of Three Models

NO 4 h. models will be produced by the Harley-Davidson Motor Company for 1913 and to replace this type the company is preparing to market a new 5 h. machine, guaranteed to deliver the full horsepower and having a piston displacement of 35 cubic inches. The motor fitted on this model will be known as the "5-35." It will no doubt be regarded as the most interesting feature of the H-D line for the coming season as it is an entirely new model, embodying many improvements over the former Harley-Davidson four, which is saying a great deal for it, in view of the fact that the 4 h. type never failed to give an excellent account of itself.

While it is new on the market this machine is not an experiment in any sense of the word; it has been in the making, and, in fact, actually on the road for close to two years. As far as outward appearance goes the first noticeable thing about the motor is the independently-operated, overhead, mechanical inlet valve. The push-rod is fitted with a silencer spring—the same construction as used on previous Harley-Davidson twins, and which successfully did away with rocker-arm and push-rod noises.

Another noticeable feature is the chain transmission now offered as an option on the single cylinder model. This drive is by means of double roller chains through a countershaft to the Free Wheel control, located in the rear wheel. Large sprockets greatly reduce chain noise and the chance for broken chains on account of doing away with short angles in the chain that are necessary when smaller sprockets are used.

Before finally putting this "5-35" motor on the market the company made a series of laboratory tests of the new motor in comparison with the 4 h. motor which has been standard on the Harley-Davidson singles for the past four years. The comparative power chart does not do justice to the 5 h. motor at low speeds; that is, it does not show the actual amount of power and the rapid acceleration



Model 9 A; Protected Belt Transmission; "5-35" Motor.

the 5 h. motor develops on the road, in comparison with the former 4 h. type.

The flywheels in the new Harley-Davidson "5-35" are heavier than those formerly used in the singles. The flywheels and reciprocating parts are carefully machined to balance before assembling, and then the complete unit or assembly is balanced as a whole, insuring an unusually smooth-running motor at all speeds.

The piston is lighter this year. Both the inlet and exhaust chambers and passages have been materially enlarged, which has done a good deal to help in the extremely rapid acceleration of this machine. Actual tests on the road have repeatedly shown that it is possible to attain a speed of forty miles per hour in 16 seconds, from a standing start, with the "5-35." The company claims that the average twin on the market will do but little, if any, better.

The Latest Harley-Davidson Twin.

The company's experience with the larger exhaust and inlet chambers and passages used

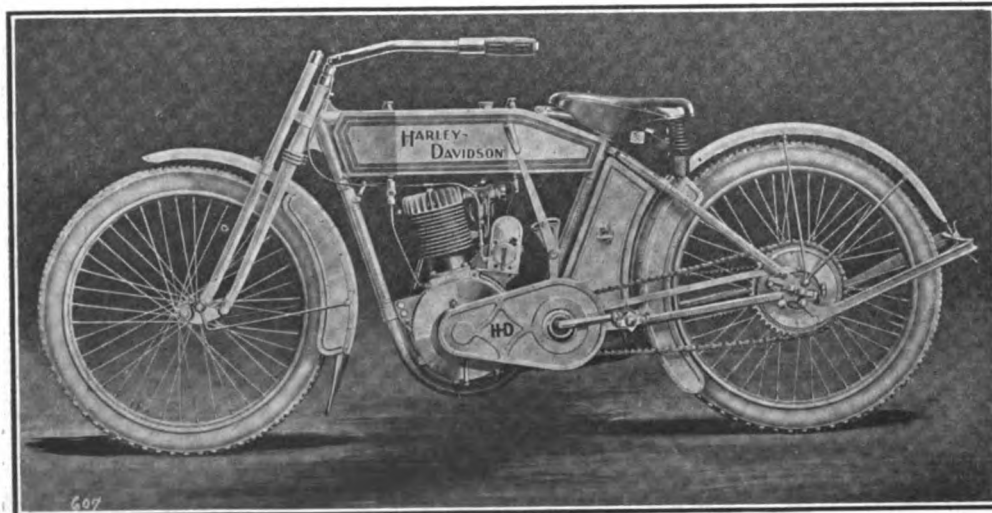
in the 5 h. motor having demonstrated that they permit a better charging and scavenging of the cylinder, thus making the motor more flexible and more powerful at all speeds, to say nothing of being considerably faster, its designers have incorporated these features in the new twin. Also, following out the idea of a more perfectly balanced and smoothly running motor, both the front and rear connecting rods having been balanced, not only with respect to each other, but also in relation to the piston and flywheels, as a complete unit.

Lighter pistons also aid in a quick pick-up and make the machine faster. These changes, together with better balanced flywheels, make it possible to throttle the new twin to an even slower pace than heretofore. A new design of hot-air intake on the carburetor has silenced completely the breathing noise which was sometimes heard when the motor was running slow or pulling hard, as on hills or heavy roads.

Crank-Pin Bearings.

Realizing that the connecting-rod bearing in all twin cylinder motorcycles is called upon to do more work and harder work than any other one part of the machine, the company has given this bearing particular attention in the 7-8 h. twin. After trying several kinds of bronze bearings and almost any number of ball bearings the Harley-Davidson engineers worked out an entirely new type of double roller bearing; that is, two independent sets of rollers, one for each connecting rod, but both working on the same crank pin, of course. They have found this type of bearing to so greatly reduce friction at this point as to increase the speed several miles per hour. Engineers agree that the roller bearing of a given size will carry a greater load than ball bearings, for the reason that the load is carried on a line the full width of the bearing instead of on a single point, or possibly a series of points as is the case with the ball bearing.

Inasmuch as the company has used both bronze and roller bearings in the twin con-



Model 9 B; "5-35" Motor, Roller Chain Transmission.

necting rods they have been able to make a very close comparison and estimate that the life of the roller bearing is $9\frac{1}{2}$ times that of the ordinary bronze type in the twin cylinder machine. An important point in regard to the roller bearings is that what little wear does develop after most strenuous tests is in the rollers themselves and they can be easily replaced by any rider for a few cents, which replacement, of course, puts the bearing in perfect condition again.

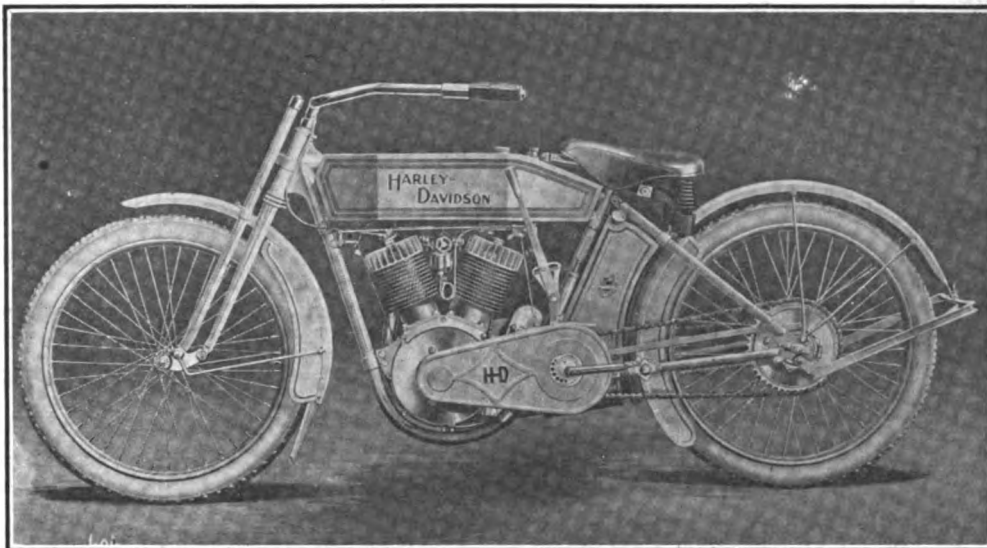
Chain Side Bearing.

All Harley-Davidson twins will hereafter be equipped with a self-aligning ball bearing (made to their order in Europe) on the drive side of the crankshaft. This was necessary because of the peculiar strains and stresses placed upon the driving shaft of a twin-cylinder "V" type motorcycle motor. At this point the bearing not only has to withstand the powerful thrusts of the motor impulses, but widely varying shocks and strains from the transmission, due to constantly varying road and load conditions as well.

These double strains, of course, spring the shaft temporarily out of perfect alignment and would make the bearing bind momentarily if a rigid type of bearing were used, such as bronze or the ordinary type of roller or annular ball bearing. These strains are bound to finally cause crystallization and consequent disintegration of the balls or rollers and races of the ordinary fixed type of bearing. Not only this, but the twisting strains being transmitted to the crankcase and flywheels sooner or later are likely to crystallize these parts, making fractures almost a mechanical certainty.

The 1913 Refinements.

Larger inlet and exhaust chambers and passages, facilitating charging and scavenging of the cylinder, and making for more speed and greater power and flexibility at all speeds; oil pocket in the exhaust chamber which catches any excess oil, preventing it from running down the exhaust valve stem and over the crankcase; the heat of the exhaust vaporizes this oil as it collects, allowing it to



Model 9E; 7-8 h. Twin, Fitted with Roller Chain Transmission Only.

pass away in the exhaust unnoticed; lighter pistons and balanced connecting-rods and flywheels; more clearance between mudguards and tires, allowing the use of chains on even 3-inch tire if desired; 28 x $2\frac{3}{4}$ -inch tires regular equipment on all models; wider forks to correspond with increased clearance all around; heavier reinforcements in the front forksides.

Rocker-plates on the front forks are now made of nickel steel and fitted with removable hardened steel bushings to take up wear after several years of hard service; these bushings are replaceable for a few cents when worn; a new stand-catch will be appreciated by those riders who have been obliged to put up with soiled hands or gloves or spoiled shoes; the stand itself has been materially strengthened by drop forged reinforcements; the operating lever for the Free Wheel Control has been put in a more convenient position; special grade of grip control wire, made in Europe, to the company's own specifications; this wire

costs considerable more than that used last year and has a tensile strength three and one-half times that formerly used.

On all chain-drive models a double eccentric crank-hanger or countershaft is used, this exclusive feature providing separate and independent adjustments for both front and rear driving chain and pedaling chain as well; armored Bosch magneto is furnished on all models; timing gears and cams are made of nickel steel with cam and gear made in one piece; longer recoil springs make a more perfectly balanced action in the fork; a concealed Yale type of lock will be a feature of the metal tool boxes this year; this is not only more convenient and safer than a padlock, but there is no separate padlock to be lost.

The 1913 models are listed as follows: Model 9A with "5-35" motor, 5 actual horsepower and 35 cubic inches piston displacement; protected belt transmission, driving through Free Wheel control, \$235.

Model 9B, "5-35" motor, roller chain transmission and Free Wheel control, \$235.

Model 9E, 7-8 horsepower twin; 60.34 cubic inches piston displacement; roller chain transmission only, and Free Wheel control. Price, \$285. Magneto ignition, Ful-Floteing seat and Free Wheel control are standard on all the Harley-Davidson models.

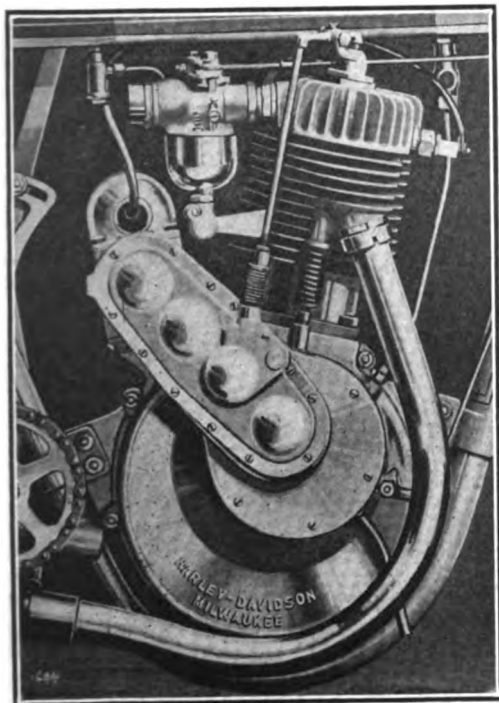
MERKELITES TO THE FORE.

SAM STICKNEY and Fred J. Barr, of Davenport, Iowa, both riding Flying Merckels, were winners of the motorcycle races at the Aledo (Ill.), fair; the former lowered the state record for three miles. The Merkel also scored at the motorcycle races given by the Regina (Can.), Automobile Club. Their riders took first and second places in the two motorcycle events.

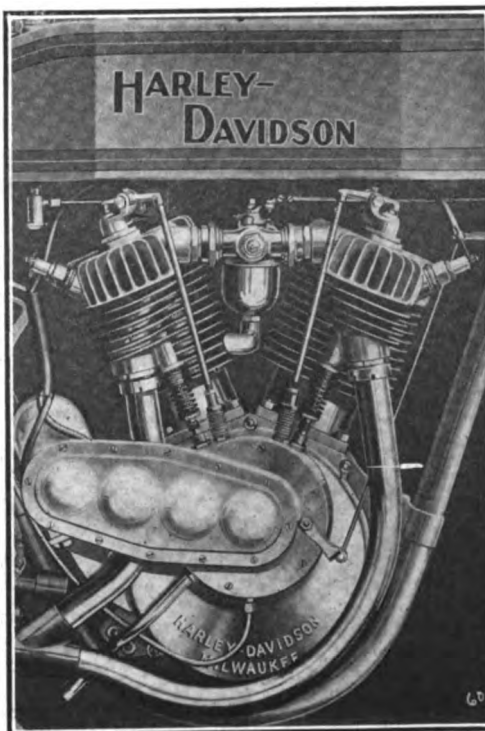
BIG SAVANNAH RACE.

IF satisfactory arrangements can be made Savannah, Ga., will be the scene of a big 200-mile road race on Thanksgiving Day. Chas. T. Earle, of Brooklyn, N. Y., has communicated with the Savannah Motorcycle Club, requesting them to arrange the affair. He promises the club that he will bring down some well known pro riders and that the record for a 200 mile road race will be smashed.

CARL BLADSTROM, of Rockford, Ill., riding a twin Indian, won the recent 25-mile motorcycle race there in 26 minutes.



New "5-35" Motor.



Twin Power Plant.

ENGLISH NOTES

BY BRITISHER

Variable Gear Controversy Waxes Warm on Eve of British Show—Waterproof Clothing; a Model Outfit—Two More Unique Cycle Cars—A New High Class Solo Machine—Detachable Wheels.

THE racing and competition season is now fizzling slowly out like a burnt-down squib, and we are in the middle of the lull before the storm, the lull being the deceptive quiet of that period in which every factory is laboring frenziedly to get something really novel or sound or sensational ready for the November show, while the storm is the burst of controversy and discussion which greets the publication of the 1913 models. The main rumbling has to do with variable gears. The three-speed hub has been borne on the top-most crest of success for the past eighteen months, and owing chiefly to the way in which it hampers the removal of the back wheel, it was thought probable that all the leading makers would come out with three-speed bottom bracket gears and combined belt-cum-chain drive for 1913.

The suburbs of Coventry have resounded to the exhaust of many an experimental machine built on these lines during the past six months. Well-known outlines fitted stealthily past, and the keen eye spotted a huge bulbous excrescence in the neighborhood of the bottom bracket. But with one or two exceptions these experimental three-speed bottom bracket gears have gone to the bad. If the test gearbox was light, it used to chew up. If it did not chew up, it was heavy. If it weighed just right, and stood up well under the tester's racket, it was found to deliver no more than 50 per cent. of the engine power at the road wheel when an indirect gear was engaged; and so on. Altogether it appears probable that the majority of the leading makers will fit proprietary three-speed hubs for 1913, instead of prematurely marketing devices of their own which are not quite perfect as yet; indeed, I have seen some very gratifying contracts already signed and sealed, and the directors of one or two gear-making concerns go about with grins as long as their driving belts.

In particular the business done by the Sturmey-Archer Gear Co. is encouraging. Its technical points are: direct drive on top gear, so avoiding a small engine pulley when a low emergency ratio is required; engine can be started by pedals or kickster with the back wheel on the ground; 50 per cent. reduction range between top and bottom. In laboratory tests the fact that the bottom gear is against the friction of two pinion trains has been found negligible. If the bottom gear be against the friction of a single pinion train only, the engine pulley has to be of small diameter; and close tests show that the losses

due to belt-slip outweigh those due to pinion friction by at least 10 per cent. Countershaft gearboxes will, however, be common on heavy passenger outfits; and a certain number of two-speed countershaft gears will figure on solo machines. The postponed problems relate solely to the production of a *light, reliable, efficient three-speed countershaft box.*

Waterproof Wear.

IT would be interesting to hear whether you have any really clever waterproof rigs for motorcycling wear on your side, as we have yet to evolve something good here. Most riders wear rubberproofed paramatta overalls, consisting of a loose-skirted reefer jacket, and tailor-cut leggings, the latter having a slit outside the calf, press button fasteners, and internal gusset, to permit the boot to be thrust through the shaped lower portion. These rigs are all right until continuous heavy rain is struck; in this they begin to leak in an hour, are sodden in two hours, and dry out very slowly. Moreover, they cannot be reproofed when they get porous, which generally occurs in three months or less. Their merits are that they are cheap (\$5 the two garments). Look neat in fine or wet weather, don't show dust, owing to their fawn finish, and are porous enough to prevent undue perspiration.

Some of us have tried patented proprietary waterproofs, made under high-sounding trade marks for round-the-round dude trippers, and sold at very fancy prices. The cloth of these garments is not really continuously proofed, but woven on a venetian blind principle, and is not stormproof at motorcycling velocities. Lots of our boys, when they get caught in tropical rain, which is seldom in an average English summer, purchase fishing waders, one-piece rubber thighboots designed for wading in trout streams; these are very sweaty contraptions, easily torn, and awkward to remove; over these they sling a black or yellow fisherman's oilskin coat, and crown the scarecrow outfit with a sou'wester helmet.

One Model Outfit.

When one of these rigs comes along, the decent hotels never have room left, and the girls quit the boulevards like partridges flushed in October. We've had a soaking summer this year, and I've invented the following rig, which brings me through six hours hurricane fit to sit down to a high-class table d'hôte. Over my boots, rubber goloshes; over my legs, shaped oilskin gaiters

of the "officer" brand, non-sticky, gray or green color, good cut; these are only marketed by one or two firms, who cater for officers, not common seamen, and they cost about three dollars. On my body I wear an ordinary fawn paramatta jacket till the storm blows, when I add an oilskin of the same type as the leggings, which is normally rolled up and stored in the gap between the tail of my carrier and the curve of my back mudguard. On my head I wear a peakless "Flixson" cloth helmet, which is really a seamless head-and-neck bag of varnished cloth, with a hole for the face. Sou'westers are no good to a speed-merchant; the wind gets under their tails, and lifts it like the planes of an airship, till it almost forces one out of the saddle. This rig is cheap and waterproof. Can any American rider suggest any improvements?

More Records Overboard.

AN annual sequel to the Isle of Man T. T. takes the form of a 150-mile race on Brooklands track—our gigantic motordrome with a lap of nearly $3\frac{1}{4}$ miles. These races provided plenty of excitement, though the uneven going inseparable from so huge an area and the unyielding nature of the concrete slabs pared down the number of finishers to the absolute minimum. In the 350cc. limited class, fifteen machines started, but only four were able to finish under four hours; the winner was an Australian, S. L. Bailey, on a $2\frac{3}{4}$ h. Douglas, with double, horizontally opposed cylinders, measuring 60 x 60mm. His time was 2 hrs. 49 min. 45 sec. Twenty-six machines toed the line in the 500cc. class, and the solitary American machine, a single-cylinder Indian best ridden by O. C. Godfrey, ran very prominently. So far the Indian wins in this country have been almost exclusively confined to their big twin cylinders, but it looks as though the Hendee factory was going to annex plenty of 500cc. scalps in the near future. Godfrey, like most of the veterans, opened gently, knowing that the hard, rough going would disable the racketty brigade in a few laps. However, the wisecracks were confounded for once. A dark horse, John L. Emerson, on the comparatively unknown longstroke Norton (70 x 100mm), jumped off at a cracking pace, encountered no trouble, and refused to be pegged back. He ran out an easy winner, covering the 150 miles in 2 hrs. 20 min. 52 sec. and was signalled to continue for the three-hours track record. However he struck tire hoods, and never got round the third clock circuit.

Hawley Wins from Godfrey.

Godfrey kept riding with a bit in hand for the first hour, but when Emerson clung on to his lead, Godfrey opened out, and the Indian got faster. Simultaneously the dauntless Oliver discovered that J. R. Haswell, one of our sporting farmers, had also got another notch or so of throttle up his sleeve. Haswell was riding an experimental Triumph racer, the first ever turned out by his makers with an overhead inlet valve. The two went at it hammer and tongs to the bitter end, but Haswell had the legs of the Indian and finished in 2-34-8, as against Godfrey's 2-35-32. However, the Indian is young yet, and without doubt the Hendee single must be taken into account for next year's 500cc. laurels. A Zenith, ridden by Weatherilt, came near beating this pair, but after 145 miles his oil tank burst, and the mess started his belt slipping grievously. Emerson en route made a track record of 1-33-25.3/4 for the 100 miles, and in two hours rode 127 miles, 645 yards. It is rumored that both the 4 h. and 7. h. Indians are shortly starting for track records of the long distance types. There is always a fine crop of these rides just before the autumn exhibitions; the oilstained racers and big cards with the figure details are a fine draw on a Show stand.

Novel Passenger Outfit.

THE same fertile brain which is responsible for the autowheel—namely, the grey cerebral tissue resident in the skull of Arthur W. Wall—is responsible for the Wall Tricarriage, a cut of which is appended. This type of passenger machine has several undeniable advantages; the double driving wheels give a splendid propulsive grip on greasy surfaces; the single steering wheel affords an enormous lock, the vehicle can be turned in its own length, and handiness is only limited by the risk of an overturn; and sideslip absolutely does not exist. Its drawbacks are that an upset is a simple matter in the hands of a careless Jehu, and that it is difficult to concentrate sufficient weight on the front wheel to prevent its lifting and jogging uncomfortably over every tiny depression along the road. The spring slipsteel arm carrying the steering wheel shows that the designer has not seen his way to positively eliminate this feature. A heavy 5 h. single cylinder engine, is placed as near the steering head as possible; a propelled shaft, flexed by two universal

joints, transfers the drive to a rear live axle, and at the fore end of this shaft is mounted a circular box containing a twospeed epicyclic gear, operated by foot pedals. The engine control—by levers and flexible wires—is mounted on the coachwork, adjacent to the driver's right hand. A geared-up starting handle obviates the difficulty of setting a single cylinder with magneto ignition into full song. The brakes consist of large compensated bands on the ends of the rear axle, and the price of a two-seater is \$420, without hood or screen. The tubular chassis is enormously strong, the side members being bent up out of the largest tubing ever seen on a motor vehicle; but probably the discomfort inherent in a three tracker will disqualify the clever little outfit from being popular on genuinely bad roads.

A Ladylike Cyclecar.

IT was curious that just after I dispatched my recent lengthy article upon cyclecars, a new vehicle should make its debut on our market, and render the need of defining a "cyclecar" doubly acute. In England it is common for a large factory to interest itself in the production of both motorcars and motorcycles, a combination unusual in the United States, and in not a few instances the same concern also runs a pushbike factory, possibly under the same roof. The Singer Company, of Coventry, has an unusually complicated business, for they have been manufacturing pushbikes, motorcycles and motorcars for years past, while a sister concern leads in the sewing machine business. The firm has now undertaken yet another line, and is producing a cyclecar. This interesting little vehicle is a miniature reproduction de luxe of the most advanced practice in automobile construction. It has a 10 h. engine (capacity under 1,100 cc.), and it weighs less than 7 cwt., but embodies every conceivable refinement applicable to automobile specification.

Details of Construction.

ITS two-seated coach-work body is mounted on a channel steel frame; the four-cylinder engine has syphon cooling, cylinders cast in pairs, mechanical valves all mounted on the same side and actuated by a one-piece cam shaft, adjustable tappets with fibre silencing pads, magneto

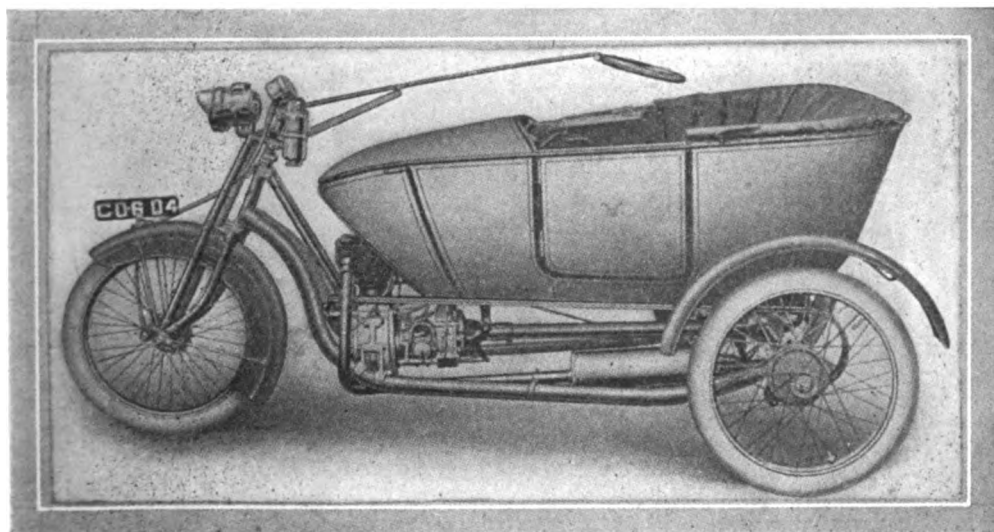
ignition, two-jet carbureter, and pump and trough lubrication. The transmission is by clutch and universal joints to a three-speed gear-box, bolted to the casing of the differential back axle, and five detachable steel wheels are provided. Is this a motorcycle in any sense of the word? Rumor, that lying jade, tells us several very familiar vehicles, are about to emerge from other leading factories, and as all of them which adopt the Singer weight and power limits, are eligible to compete against sidecar outfits in our motorcycle competitions, it is likely that there will be a fresh definition of "cyclecar" before the year is out.

Another New Motorcycle.

THE boom in motorbicycles has inspired several high-class firms, hitherto engaged only in the pushbike business, to dabble in gasoline, and the classiest of the newcomers is the Lea-Francis. This firm has always occupied a unique position in the international cycle market. When the average firm was trying to produce a pushbike for fifteen dollars, and dropping its price a cent or two to cut the firm next door, the Lea-Francis people pursued a policy of splendid isolation, and with a calm dignity continued to make, advertise, and—what's more—sell machines at \$80 to \$100. "Good—not cheap" was their slogan, and at various times they have adopted almost every conceivable luxury except gold-plating; for instance, they would rather make the knob of a gear lever out of ivory or ebony than of vulcanite or boxwood. It is interesting to observe their notions about a motorbicycle de luxe. It has a 3 h. V twin air-cooled engine, with completely enclosed chain drive (two chains only), countershaft two-speed gear obtained by sliding dogs, and carrying a multiple disc clutch on the same spindle; extraordinarily complete mud-guarding, kick-starter, automatic carbureter, and detachable wheels. The idea is to produce a machine which can be ridden in a boulevard suit, without the rider getting a spot on his dude garments under any circumstances.

The Detachable Wheels.

I DESIRE again to emphasize the detachable wheels, an English novelty, which has got to become universal. As my drawing in the issue of August 22 indicated, a knockout spindle is threaded into a hub made in three sections. The three sections of the hub are coupled up to each other by dog clutches; the central section carries nothing but the spokes of its wheel; when the knockout spindle is withdrawn, this central section is held only by the dogs, and drops out as soon as the main axle nuts are loosened, and the spring of the forks allows the dog clutches to disengage. The end sections of the hub ride on bearings carried by barrels permanently fixed to the fork ends. The Lea-Francis designer has ingeniously perfected the detachability of the front wheel, to which there was one obstacle—the rim brake, standard in English practice. He scrapped this brake, and substituted a dummy beltrim of small diameter, pinned to the spokes. A lever and shoe pivoted to the fork crown operate on this rim, and none of the parts obstruct the wheel from dropping out as soon as the front wheel stand is lowered, and the knockout spindle withdrawn.



The Wall 5 h. Single-Cylinder Tri-Car.

INTERNATIONAL TOUR

BY DONALD M'KIE

PART VI



WHILE completing the trip over the Simplon Pass in Switzerland, trouble was experienced by the Columbus tourists in Europe, and this, together with complications following an accident, necessitated Donald McKie's making the current instalment of the International Tour story comparatively short. In the next issue, however, there will be another long article, dealing with the experiences of the

Atlanta tourists in Paris and other French cities. The present instalment begins with the trip over the famous pass.

The remembrance of our first attempt at the Simplon Pass will not soon pass away. After a continuous climb of $2\frac{1}{2}$ miles we stopped to allow our engines to cool and at the same time to eat some fruit. The road is forty feet wide and we left our machines standing on one side, allowing plenty of room, as we thought, for another vehicle to pass. However, a horse which came along a short time later became frightened on seeing our machines and dashed to the extreme right of the road, upsetting the carriage and throwing out its occupants, one of whom happened to be the mayor of Brigue. The result was that we had to deposit 500 francs with the police department to pay for repairs, with the understanding that if there was any surplus it would be refunded to us.

That night we remained at Brigue and resumed our climb the next morning. A number of stops were necessary to cool the engines, but we finally reached the highest point of the Pass, having climbed 28 kilometers of continuous hill. As might be expected, the scenery was excellent throughout the entire trip. After the summit is reached power may be shut off for the downward coast. On completing the Pass we were again stopped by the gendarmes and relieved of our pass tickets. We had taken the required time in making the trip and immediately went to the customs office where our deposit for entering Switzerland was returned.

Poor Roads in Italy.

Further on we came to the Italian customs office, and not being able to show an international pass we were required to pay about \$16, practically all of which will be returned when we leave Italy. Fuel came rather high in Italy, but we were glad to be able to get it at all. We got our full share of punctures here, collecting eight between the three machines in one day, and an average of four a day for the succeeding days. One hill we

reached in the city of Pistoia was as bad the Simplon Pass, but not so long. The roads in Italy are far from the best.

Rome was our next stopping point of interest; on entering this city one has to go through a huge gate. We were forced to abandon our motorcycles as the streets are very narrow. After a couple of days we decided we had seen enough ruins to last us a lifetime and so left for Pisa. It took us two days to reach this point and en route we saw the Mediterranean. In Pisa we saw the famous leaning tower, certainly a wonderful creation.

Many Hills Encountered.

It was raining when we left Pisa and it continued to rain for the rest of the day. On account of the dust from the quarries the roads when wet become very slippery, in fact they were the worst we had ever encountered, and progress was very slow. After leaving Spezzia we came to a stiff hill and the machine carrying double had to shed its passenger. We encountered numerous other hills after this one, but had no further trouble. At Genoa we tried to purchase some tires but they were not to be had. Here, as in other Italian towns, drivers use all parts of the road, keeping to the left more than to the right.

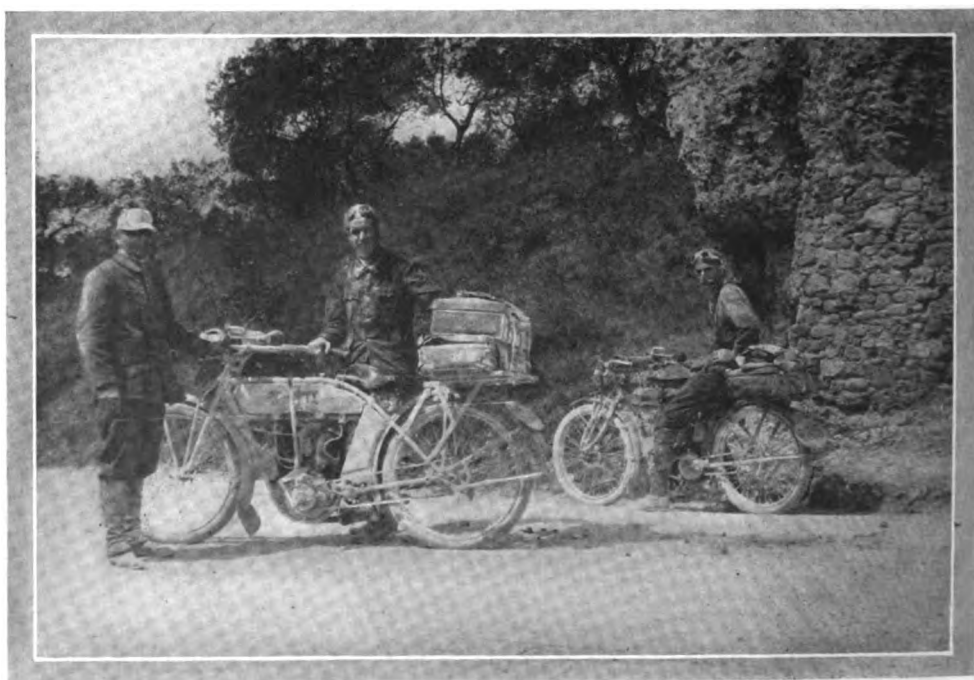
We reached Susa about 5 p. m. and then started the ascent of Mt. Cenis. Had we known its severity we would never have attempted it at that late hour. We had not gone far when Hudson had a chance to show his good nature by walking, as the machine would not carry double. A rider on an N. S. U. two-speed happened along and even on low gear experienced considerable difficulty

in making the climb. It was almost dark when we reached the Italian customs office; after inspecting our machines they gave us what money was coming to us from our deposit. We remained at a hotel near the customs office till morning and then continued our climb.

The Arrival in Paris.

Hudson did not do much tandem riding until we reached the summit, which is 6,829 feet above sea level; its grades are much steeper than those of the Simplon Pass, which is only 6,585 feet above sea level. It is sixteen miles from Susa to the top, and the scenery is fine all the way. The descent was easy and we soon reached the town of Landslebourg. The French customs are located here and although we had no international pass they gave us a permit to ride in France ninety days and our entire outlay was only 60 centimes or twelve cents for the Government stamp.

The road continues downward to Modane; in fact, there is a slight downward grade all the way to Chambéry, where after a short run the mountains are left behind. We took a roundabout route to Paris, trying to avoid the larger cities and to a certain degree we were successful. We had excellent roads to within fifty miles of Paris and we made the best time of the entire trip. However, nearing Paris the roads become very poor, but the streets in the city are as a rule well paved; and they are usually crowded. It might be well to say that it is very hard to find tires; even in Paris it took us a whole day to get any that would fit and then they came high. It is best, if possible, to ship them ahead before starting a tour.



PLUGGING SAND ON NEVADA'S BARREN TRAILS

Graphic Story of a Vacation Trip from San Francisco to the Pyramid Lake Indian Reservation, Over Mountains and Through Districts Rarely Seen by Motorcyclists.

BY VOLNEY E. DAVIS

IN the following article Volney E. Davis, the record-holding transcontinentalist, of San Francisco, gives an interesting description of a recent vacation trip on his motorcycle. With Lew Golding, another Frisco enthusiast, Davis journeyed to the Indian Reservation at Pyramid Lake, Nevada, encountering widely varying roads and a thrill or two. Davis' story follows:

When my friend, Lew Golding, discovered that his vacation came at the same time that I was taking mine, he asked me to accompany him on a trip to the Indian reservation at Pyramid Lake, Nevada, to visit his uncle, and I agreed to go. Said uncle is the proprietor of the general store at the reservation and it was Lew's desire to give him a surprise. Accordingly he did not let him know of his intended visit. Lew's 1910 5 h. Indian did not appear fit to make such a trip, but he decided that with a little tuning up it would answer the purpose. I had a new 1912 7 h. Indian, which had not run more than 1,000 miles. I used the same luggage carrier that served on my cross-continent trip and carried a half gallon of oil and a generous assortment of small parts.

We left Frisco on the 6 a. m. ferry for Oakland and after eating breakfast at the latter place Lew tightened up his carrier and we took to the road. We had good going and no trouble, except with my partner's carrier, until we reached Niles (30 miles), when Lew's extra oil can sprung a leak, and after filling our tanks we had to ditch it. Everything went smoothly then and we reached Stockton (92 miles) in due time. Here we had lunch and then went on to Sacramento, where we remained overnight and part of the next day. We then continued on to Folsom, at which point the good roads so far encountered gave way to rough and rocky trails with deep sand and ruts. It was on this road that Lew got his first spill and broke off a crank. He continued to Placerville with his feet dangling, where he had the crank repaired.

From Placerville we began a long steady climb on the 50-mile grade along the American River, winding through fine scenery to the summit, which is 7,394 feet above sea level. The roads were in poor condition, with deep dust and sand and hard grades, the steepest being Slippery Ford, a 22 per cent. pull and two miles long. To make it worse the road was being repaired and it surprised me to see how well the old 1910 machine made the climb.

Records Broken for Sand.

After reaching the summit we had a 2½-mile steep down-hill grade and then deep sand to Lake Tahoe. We stayed there overnight and got a room at the Lakeside Park for which we paid \$2.50. The supper they served would not have satisfied a healthy grasshopper, and the beds were the kind that keep one awake all night. I went in the lake for a swim, but could not persuade Lew to come with me, as he claimed he did not need a bath. In justice to the hotel I must say that we had a good breakfast the next morning. Before

leaving we met a party of automobile tourists from Los Angeles.

On leaving Lake Tahoe we had nothing but sand to Glenbrook, but we took things easy, stopping every now and then to view the lake, as Lew kept reminding me that we were in no hurry, being out for pleasure and not work. After leaving Glenbrook we had an easy up-hill grade for about one mile and then followed a long sandy downward grade for nine miles. This is known as the famous Kings Canyon Road and continues on to Carson City, where we ate lunch. From Carson City to Reno we found fairly good roads with a few stretches of sand.

In Reno we were the guests of Frank Golden, one of the proprietors of the Hotel Golden, justly famous for its comfortable rooms and beds. Frank Golden is also well known as Nevada's crack sand rider. I might say here that Nevada is certainly the place for anyone wishing to practice sand riding.

A Genuine Endurance Test.

We left Reno at 10 o'clock the next morning and found good roads to Derby, where we learned that the road from Wadsworth was very bad and that by taking a cut-off and not going to Wadsworth we could avoid several miles of the bad stretch. We did this, avoiding part of the poor road, but the rest, 16 miles, kept us busy for six hours. I had no motor trouble, but broke my chain four times on account of the deep dust. The road was particularly bad at this time, as a new railroad was being built and the heavy trucks that hauled the material cut them up to a great extent. With sand, sagebrush, deep chuck holes and alkali, this section was a regular desert, with an occasional peep at the green trees along the Truckee River to relieve the monotony.

As we were going through Dead Ox Canyon I came upon the figure of a man, lying face downward in the deep dust and to all appearances dead. However, upon investigation I found him to be dead drunk and was unable to get him to move. We had a hard struggle getting out of Dead Ox Canyon and going up one steep hill, with seemingly bottomless sand, the best we could do was to let the machines pull themselves and walk alongside. I honestly believe this was the worst alkali and sand road I ever encountered.

Later we obtained some water from an Indian called Captain Dave, whom we met coming along in a big wagon with his squaw and several children. He is one of the educated Indians and talked quite freely, which is something very rare, as one seldom gets more than a grunt from the average redman. Soon after leaving Captain Dave we reached the reservation, but the tables were somewhat reversed, for instead of Lew surprising his uncle, he was rather surprised himself to learn that Mr. Golding had gone to Reno to get married, and would probably be away two weeks.

Making New Friends.

George S. Shaber, manager of the store, was not acquainted with Lew and about sup-

per time, having gone without lunch, we were beginning to get worried when George told us that there was an extra bed and that we might obtain supper at the mess hall. We found Miss Avis Chapman in charge at the latter place and received good treatment at her hands. First she allowed us to wash ourselves and then led us to the dining table, which was about 30 feet long. There we proceeded to do justice to a hearty meal.

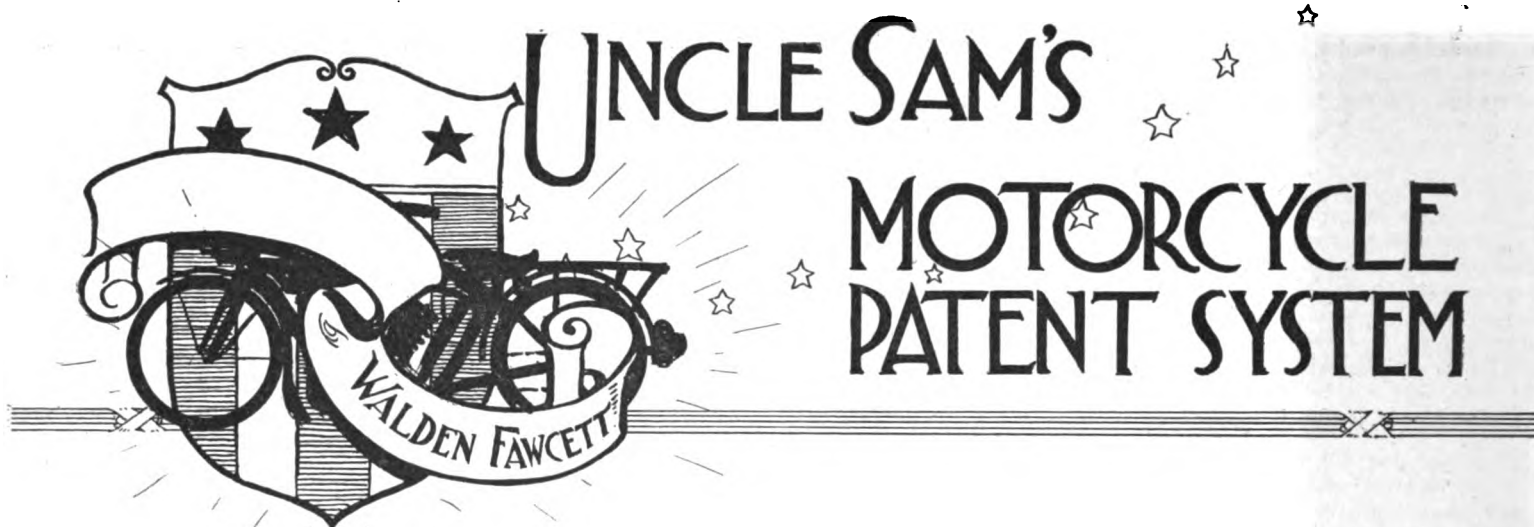
After the meal it was agreed that we give the ladies a tandem ride, and since Lew had left his carrier in Placerville, the pleasure was all mine. I was kept busy that evening and all the next day giving, as it seemed, everybody in town a ride. The reservation is situated near Pyramid Lake, but most of the inhabitants dwell along the Truckee River, just east of the lake. The river furnishes water to irrigate the land, and it is this irrigated land that supports the population, about 1,000 in all. There are a few white people on the reservation, about fifteen men, some of whom have families.

The Indians here are the Piutes and are far ahead of any I had previously seen. There are among them Indian policemen, paid from \$20 to \$30 a month by the government. These policemen, if they may be called such, are not on duty all the time, being allowed to do other work except when called upon to make an arrest, and then they seldom fail to get their man. Captain Dave, of whom I have already spoken, is a member of the force and receives \$25 per month.

No form of religion prevails among these people. Heretofore they have had no place to worship, but a church is now being erected and they will soon have a chance to hear the gospel. They now spend their Sundays gambling, as that is the only time it is allowed. The squaws as well as the men love their cards, the former playing what might be called "near poker." They never play for more than 25 cents, while the men stake larger amounts.

One of our objects in making the trip was to go trout fishing, but we had ill luck on the lake, so spent the remainder of our time at the river, where carp and catfish were plentiful. There was one small boy, weighing only about 45 pounds, who took a great delight in fishing, and when he got a two-pounder at the end of his line it was interesting to watch him tug away for some time and finally call for help. We had many pleasant and novel experiences that I would like to tell about, but it will suffice to say that on all my trips I never had a better time or received more generous treatment.

The return trip was no less venturesome than the outbound, but the experiences were somewhat similar. We followed the same route to Reno and then went by way of Truckee, Donner's Lake and the big grade, and found the roads to be much better than via Placerville. We had lunch and some ice cream at Colfax, and then rode to Auburn and Sacramento. From Sacramento to San Francisco we followed the same route as when outbound and arrived home on August 24, having been away twelve days.



NE of the foundation stones of the motorcycle industry is found in the United States patent system, the object of which, broadly speaking, is to encourage progress by guaranteeing to inventors and designers the fruits of their originality and ingenuity. And, because of this very influence which exercises a protectorate in behalf of experimenters and manufacturers who make

new discoveries calculated to benefit motorcycle users, it is interesting to note that there is impending at the U. S. Patent office at Washington a change in jurisdiction and procedure that should mean much to the motorcycle trade, directly or indirectly.

This prospective improvement is to be brought about by what is known as a "re-classification" affecting the handling of motorcycle patents. To appreciate the significance of this it is necessary to glance at the plan which Uncle Sam has followed in handling motorcycle inventions during the score of years which may be said to represent the span of the motorcycle industry. And just here it may be noted, to the probable surprise of many readers, that the United States Government has, to date, granted more than 175 patents on motorcycles. A yet greater number of inventions in this field have been submitted to the Federal experts in an effort to win patents, but a number of these applications had to be rejected because they did not cover real or practicable inventions. Practically all of the more than 175 patents which have been taken out on motorcycles are, moreover, the property of Americans. Our Yankee inventors and designers of motorcycles have been so far ahead of their foreign competitors that there has been little chance for foreigners to secure patents here. However, there are on file at the Patent Office, for purpose of reference, a considerable number of foreign motorcycle patents—that is patents taken out on motorcycles in various foreign countries, it being now the custom of leading nations to exchange copies of patents issued in order to afford complete international files.

How Motorcycles Are Classified.

At the U. S. Patent Office the examination

of inventions to determine whether or not they are patentable is conducted by forty-three divisions, each division being in charge of an expert "examiner" and several assistant examiners, and each division concerning itself only with inventions in the one particular industrial field upon which its officials have specialized and upon which they are considered authorities. But strange as it may appear, there is not an examining division devoted to motorcycles, nor yet to motor vehicles in general, although this is in effect the object of the reclassification now in progress and which has already been referred to.

The only explanation of the present state of affairs is that Uncle Sam often moves slowly in the matter of innovations and the motorcycle industry, like the whole automobile trade, has developed so rapidly that the Patent Office was caught unawares, so to speak. When motor vehicles began to become a factor in the transportation world there was already in existence at the Patent Office an examining division devoted to "Carriages and Wagons," and all motor vehicles were placed within this jurisdiction, and there they have remained ever since. Of course, the capacity of the division has of necessity been greatly increased, owing to the tremendous activity of invention in the motor vehicle field and experts have qualified specially to pass judgment upon motorcycles and automobiles, respectively, and devote their entire attention to these lines. However, the general title of the division has remained as in the days when carriages and wagons were the most popular vehicles. There may be no change in this respect, even after reclassification—that is, for instance, no special division may be created for motorcycles—but at least there will be subdivisions for motorcycles and other forms of motor vehicles within the present main division, and this definite apportionment of responsibility is expected to facilitate the examination of inventions and the issuance of patents, as it will certainly simplify the keeping of the archives of the office, and thus will save time and labor for inventors, manufacturers and others who may have occasion from time to time to consult the records and files of motorcycle inventions.

Many Shock-Absorbing Devices.

Not all the patents covering inventions in the motorcycle field are issued as the result of examinations by the division just mentioned, although the great majority of motorcycle inventions follow this course upon

reaching the Patent Office. The most notable exceptions are those inventions which concern, say, the frame of the motorcycle and which go to an examining division created years ago to handle "velocipedes," and which is still operated under that rather obsolete title. Many of the patents taken out some years ago on bicycle frames were passed on to the motorcycle industry, the inventions being as applicable to the newer type of cycle as to its predecessor, but there have, of course, been some brand new inventions in this field. Lately, however, motorcycle design has been so tending toward standard form that there has been a gradual diminution of applicants for patents on novelties in frames. The one line where inventors are yet busy is that which involves the problems of shock absorption. It is interesting to note, however, that the air-cushion principle has, judging from current patent application, been largely abandoned as a solution and the efforts of inventors appear to be now concentrated on springs in one form or another.

As the inventions that concern themselves with motorcycle frames are examined in a division apart from the main motor-vehicle section, so likewise are starting devices, etc. Electrical devices designed for use in conjunction with a motorcycle are passed upon in yet another division, and so it is through the entire list of accessories. Speaking of the use of electricity in connection with motorcycles, it may be mentioned that on the oldest of the "freak" motorcycle inventions for which a patent was ever sought was an electrically operated machine in which the current for operating the cycle was to be generated by the pedaling of the rider of the machine. This was one of a number of motorcycle inventions which, while mechanically eligible and consequently patentable, were impossible from the commercial standpoint.

First Motorcycle Patent.

It may be surmised from this mention of the electrically operated machine that by no means all of the 175 motorcycle patents which have been issued covered inventions approximating the motorcycle as we know it today. Not only have the inventions shown range or variety in the matter of propulsive power, but there has also been much latitude as to the appearance of the vehicle itself. It has, generally speaking, been the rule of the officials to admit to the motorcycle category every form of motor vehicle with two wheels or two main wheels.

A search of the secret archives of the Patent Office would seem to indicate that the pioneer invention in the motorcycle field—or at least the forerunner of all our present-day motorcycles, was patented in the year 1872. It was designated as an "improved velocipede," the improvement being found in the fact that it was a power machine. In this early attempt, steam power was provided, a rather cumbersome engine being supported on the frame between the two wheels. The use of the gas engine in this connection does not seem to have been embraced in any patent until the year 1888, and even after that the progress of invention in this field was quite slow until 1895 and 1896, when there was inaugurated that activity on the part of inventors in behalf of motorcycle invention which has been continuous ever since.

Many "freak" inventions have been submitted from time to time in an effort to secure motorcycle patents, although the number has not been nearly so great as in certain inventive fields as, for example, those where the "perpetual motion" ambition has had reign. One of the most fantastic of all the "freak" motorcycle inventions that have reached the Patent Office in recent years was that which called for the suspension of the cylinders in the position of spokes in the rear wheel, it being necessary, of course, for the cylinders to revolve with the wheel.

The Trend of Improvements.

The present trend of the motorcycle industry, as reflected by the applications reaching the Patent Office is all in the direction of greater compactness of the power plant and added reliability. It is evident too, by this same method of taking the pulse of the industry, that increasing attention is being paid to the element of general appearance in a motorcycle. It may be added that all such new departures are covered by what are known as design

patents to cover mechanical features only. The number of design patents on motorcycles taken out within the past year or two shows a marked increase, and it is the expectation that this will be the sphere of greatest activity in the future since there would seem to be little room for further mechanical patents except for minor improvements, etc.

The reclassification now in progress that will affect the examination of motorcycle inventions will benefit motorcycle inventors and manufacturers, and, indirectly, motorcycle users, but additional benefit will undoubtedly be conferred by a reorganization and modernization of our whole patent system that is now in progress. Congress in the closing days of the last session appropriated the sum of \$10,000 to enable the President's Commission on Economy and Efficiency—a body of "business doctors" and authorities on system—to thoroughly investigate the Patent Office as to methods, personnel and equipment. This investigation, the verdict of which must be submitted to Congress in the form of specific recommendations next December, is expected to provide a working basis for a thorough overhauling of the patent system. The improvements to be introduced will tend to quicken the whole procedure of the Patent Office, but at the same time will allow more careful examination of applications for patents with the result that the validity of patents will be strengthened and manufacturers will presumably be spared many such legal contests as now develop over questions of infringement.

New Building in Prospect.

Another prediction that may be confidently made in this connection is that the country will ere long be provided with a new Patent Office and one adapted to the needs of the greatest inventive nation in the world—a nation whose people have taken out a total of more than one million

patents, or probably one-third of all the patents issued in the world. The present Patent Office has long been inadequate and gradually the congestion due to the accumulation of records and documents has increased until now the limit has been reached. From cellar to attic every inch of available space in the present building is crowded with the archives. Most of these papers are on open shelves, exposed to the ages of time and, worse yet, they are ever menaced by fire, the Patent Office building not being a fireproof structure. The loss of many of the documents of file—not only original patent papers but also records of deeds of assignment covering inventions sold or transferred by the original inventor—would be irreparable to manufacturing interests as well as to the government. The plan is to erect a new Patent Office building of liberal proportions at an expenditure of several million dollars and, as a stop-gap to tide over present needs, to build a one-story building in the court of the present Patent Office that will afford storage space for the ever-expanding document files until a permanent new home can be provided.

Registration of Trade-marks.

The motorcycle trade not only relies upon the patent system to protect its designs and mechanical inventions, but also for the registration of the trade-marks which are valuable assets in this industry as in many others. Dozens of trade-marks in the motorcycle and kindred trades have already been registered and the number is constantly growing. Fanciful names and the names of individuals or manufacturing firms seem to have been much favored by makers of motorcycles. The Patent Office has been obliged to refuse registration to some names in the motorcycle field, however, because of the rule that geographical names will not be registered as trade-marks. Officials of the Trade-Mark Division of the Patent Office say that of all manufactured products none are better adapted than motorcycles to the carrying out of the requirement that a trade-mark shall be prominently displayed on the goods that it is designed to identify. Names, initials, etc., are particularly effective as trade-marks if distinctively displayed, as on most motorcycles.



One of the Busy Departments in the Patent Office and an Exterior View of the Patent Building.



How I Became A SIDE-CAR CONVERT

PHILIP H COX

MY first experiences with a motorcycle were begun in the summer of 1910, with a 1910 Excelsior 4 h. battery model, and such experiences as they were; I am sure I sampled all the fool stunts known—from pedaling around the block with the battery plug in my pocket to pushing the machine home after working over it for several hours, only to find on arriving home that my gas tank was empty. Previous to buying my Excelsior I had pushed a Pierce bicycle 11,500 miles in five years, so you see I certainly did love this method of seeing the country, as all my riding has been done purely for pleasure. But by 1910 I noticed that motorcycles were giving much more satisfaction to the fellows than previously. About this time I noticed a funny feeling coming over me whenever I saw a chap go shooting by on a motor, particularly if I happened to be pushing my wheel up a hill. Up to this time I was almost prejudiced against motorcycles, because most of the fellows I knew who had machines were continually complaining of the trouble they were having.

One evening I met a friend of mine who had just got home from business on his Excelsior 4, and after he had said a lot of nice things about his machine and motorcycling in general, he turned sharply to me and said, "Say, you needn't take my word for it, get on and try it for yourself." So he explained the grip controls and told me there was practically nothing else to it, any more than riding a bicycle. Well, I finally got started on a slight incline and kept going for about five miles up and down hill and I suppose I will never forget the

thrill of that first ride on a real motorcycle—to see a big hill directly ahead and not have to strain a bit, but only turn a grip a bit and feel the machine jump as though it were alive was something new and decidedly pleasant. There was very little sleep for me that night and for a good many days and nights afterward I could not get the fever out of my head. I had it so bad that I would hold up anybody I met on the street who I thought might know something about machines, till I was finally told by a good friend that the only cure for my trouble was a motorcycle.

The Purchase of a Mount.

By this time I knew that a motorcycle that I could call my own was the only thing that would enable me to get down to a normal state of mind and give my friends a rest, but I was also aware that my "better-half" would object to my drawing \$225 out of our treasury for a machine that was to benefit only one member of our family of five. So I

talked the matter over with a friend of mine, who said he had faced the same kind of a problem when he wanted to buy his first machine and that he solved it by telling his wife that he would put a tandem seat on and take her too. So I "doped" out all the nice things I could about riding a motorcycle a la tandem and sprung it all at once when I saw a good chance. Say, fellows, it worked fine. My wife said, "Why, yes, I think it would be fine to get out and see the country and visit many of our friends that we could not find time to visit by the ordinary methods of travel." Well, you can bet I made a bee-line to the motorcycle shop for the mount I had had my eye on for the past month, and hustled it home. As I have already stated, I rode 10,000 miles on this machine in the two years following, and of this distance my wife rode on the tandem seat for about 4,000 miles. This, of course, was a pretty fair showing for both of us.

By the spring of 1912 I found myself riding alone most of the time as our household cares had increased in the past two years so that my wife found it difficult to get more than two or three hours at a time away from home, and as she had to dress especially for tandem riding and then change when she arrived home, she often thought the trouble of getting ready was hardly worth while, considering how short



of five. So I



THEN AND NOW.

The small picture at the top shows the method adopted by Mr. Cox in the bicycle days. The large photographs below require no explanation. They tell their own story.

a time was left to ride. Then again my three children were growing up and I realized that I was spending practically all my spare time on the machine while I knew I ought to spend more time with them. These thoughts disturbed me every time I took a ride and I used to come home feeling I had done my family an injustice by acting so selfishly. But I did not know what to do about it; I did not know how I could give up riding as it had become second nature to me, and I could not afford an automobile. But one day a friend who had tried my suggestion of taking his wife on a tandem seat and who had failed to please her, told me he had solved the whole problem by getting her a sidecar.

Sidecar Solves the Problem.

You may imagine I got interested at once, and began to investigate this sidecar proposition for all it was worth. We soon were bringing out all our old numbers of *MOTORCYCLE ILLUSTRATED*, and eagerly waiting for each new number that might show photos or articles on sidecars. I also got into communication with everybody I knew who had a car, to learn from an unbiased source just what the riders thought of them. I soon became convinced that while a sidecar is not mechanically perfect, it was entirely practical for my purpose. After consulting about fifteen men who owned and operated sidecars, I arrived at the following conclusions, viz.:

First: That for ordinary give and take country roads, I ought to have not less than a 7 h. machine.

Second: That I should by all means avoid using a flat belt for transmission; a V belt will pass, but the chain is ideal.

Third: That a two-speed gear is a great convenience at times, but with a good clutch one may navigate all ordinary roads.

Fourth: That owing to the peculiar side strain put upon the sidecar where it connects to the motorcycle, extreme care must be exercised in determining the make of car to use, as a break at any one of the three or four points of connection, while riding, might prove very serious.

We finally decided on a Harley-Davidson 7 h. chain-drive, with free engine clutch and an M. M. sidecar. The whole outfit weighs just 380 pounds, the sidecar making up 100 pounds of this. You will observe by the photo that there are five of us on board at once. Our total weight, not counting the machine or car, is 390 pounds, making a total of 770 pounds for our engine to pull. I have taken this load all around North Jersey within a radius of 30 miles of Montclair and those of you who have been through this section when your compression was not just right know that our roads are far from being level; yet we have been able to climb all the hills so far. We have only ridden our new machine 700 miles, but the whole family is thoroughly in love with it and "Pop" never has to ride off alone.

As near as I have been able to determine so far, we get from 40 to 50 miles per gallon of gas and about 100 miles to a quart of oil. A friend of mine who has the same make of motor and sidecar told me that with a passenger in the sidecar weighing 190 pounds, his speedometer has registered 45 miles per hour at maximum. So you see there is plenty of reserve power for all ordinary purposes. I have found sidecar riding to be much more restful on the nerves, as one does not have to worry much about skidding or maintaining balance; and owing to the load, it is easier to ride slowly and see more of the country.



BROOKLYN INVINCIBLES.

At the last regular meeting of the Invincible M. C., of Brooklyn, N. Y., the members kept their enthusiasm in check long enough for a photographer to get in his work and the accompanying picture is the result. In the back row, from left to right, are Thompson, Zechiel, Chase, Graves and French; in the center row, left to right, are Warlick, Vine, Constant, Vail, Mann and Nason, and in front are Washburn, Aiken and Livingston. The photograph is by Stout, one of the club members.

CLUB INCORPORATES.

The directors of the Invincible Motorcycle Club, of Brooklyn, N. Y., which was incorporated October 9, are as follows: H. E. Stout, 251 Lafayette avenue; F. H. Chase, 230 St. James place; R. F. Graves, 703 Sterling place; J. B. French, 247 East 3d street, and E. C. George, 149 Remsen street, all of Brooklyn.

The Indianapolis (Ind.) M. C. recently held its first annual endurance run to Spencer, a distance of 130 miles.

BOOSTING FOR DENVER.

Boosters in the Short Grass Club, of Kansas, want to see the 1913 convention of the F. A. M. held in Denver and they are preparing to work up a campaign with a view of bringing the big assembly to the Colorado city. Should the assembly be held there the 1913 tour of the Short Grass riders will be started at Kansas City with Denver as the turning point.

ANOTHER CLUB IN CLEVELAND.

The West Side M. C. is the name of a new motorcycle club that has been formed in the Sixth City. W. H. Simpson has been elected president. Meetings will be held every Wednesday at 7706 Lake avenue. It is not an F. A. M. club at present, but it is the intention of the riders to affiliate soon.

A MOTORCYCLE club was recently organized in Mobile, Ala., and the following officers were elected: Edward Kocher, president; M. M. Wilinon, vice-president; V. W. Root, secretary-treasurer. Ben S. Stanley was chosen captain and P. S. Bacon and W. R. O'Dell lieutenants.



Henry Mesinger (at Left) with Department Heads and Employees at Dedication of the New H. & F. Mesinger Factory, Which Was Followed by a Banquet.

A YANKEE ON EUROPEAN ROADS

MAXIMILIAN ST. GEORGE

IN the present instalment of his article on European touring conditions, Maximilian St. George, the Chicagoan who is now riding on the continent, deals principally with Italy. He reports that good roads are scarce and gasoline rates exceedingly high, but striking scenery has to some extent offset his troubles along the route.

My motor was working so well that I decided to leave Innsbruck that evening and travel over as much of the pass as possible. The ascent of the Brenner Strasse, with fine scenery on all sides, begins immediately after leaving Innsbruck. I passed through Schupfen, 2,300 feet above sea level; Schoenbergerhof, 3,200 feet, and Matrie, 3,300 feet. On this pass, contrary to the custom on other roads in Austria, vehicles keep to the right and in rounding one turn, I barely missed a collision. It was a pretty sight to see the lights of Innsbruck and the nearby villages from so high a point. I passed one wayside shrine in front of which a light was burning and it impressed me deeply. It is not an uncommon sight in Austria and Bohemia to see shrines, statues of saints, crosses and crucifixes along the roads. At Matrie I stopped at a large gasthaus over night. The gasthauses of the Tyrol are much more pleasant and the accommodations better than those in Bohemia and Germany.

The next morning I had passed through Steinach and Gries, when my engine refused to pull and I had to walk a few hundred yards to the top of the pass, 4,500 feet above sea level. The descent is through excellent scenery via Gossensass, Sterzing, Mauls, Franzenfester and Brixen to Bozen, on the Eisach River. I had to ford a dozen brooks and the inner tube of my rear tire was punctured three times. While repairing one of these punctures a couple of English cyclists who were touring this section gave me some assistance.

Franzenfester is a fortress and taking pictures is strictly prohibited. The glaciers of Stubbaythan are visible from Sterzing. Brixen, an ecclesiastical capitol, is already semi-Italian, as is Bozen, which lies in one of the finest Tyrolese glens. A good road traverses a narrow valley between Bozen and mountain-girdled Trent and passes through Neumarkt, Salurn and San Michele, all of which are Italian towns. The road is very good through this land of sunshine and wine, and for the first time on the trip I was able to ride with my mantle off and feel comfortable. I continued on through Ale, Rovereto and along the Adige River to Borghetto, at which place the customs official certified that my machine had left Austrian soil.

Italy's Low License Rates.

A moment later I came to what might be called the customs outpost. An officer here wrote out a description of my motorcycle and then sent me on in company with a carabinieri (a guard) to Peri, where the main customs

office is located. The carabinieri allowed me to go ahead and the official at Peri seemed surprised at seeing me alone; when the carabinieri arrived later the chief severely criticized him for allowing me to get out of his sight. At first the official insisted that I make a deposit, but after showing him my customs ticket and membership card in the Automobile Association he finally made out a pass allowing me to ride in Italy for three months and the entire cost was about five cents. It is cheaper to tour in Italy on a motorcycle than on a bicycle. While waiting for my permit to be made out I prepared to take some pictures, but had no more than taken my kodak out when a soldier, followed by a number of officers, came out and for a while I was afraid I would not be able to retain my kodak.

After being detained about forty-five minutes I rode along the Rapid Adige, through Dolee and Volargne to Verona. Some fifteen miles from Verona the mountains almost meet and the road is protected by a fort and a drawbridge. From this point I had a fine broad road. I stayed at Verona overnight and received fine accommodations at very small cost. I continued on the next day to Gabbia, where they refused to cash my American Express money order, so after purchasing some gasoline I took the road for Bologna, 80 miles away. I passed through a number of small villages over splendid roads. A short distance from Poggio Rusco an automobile overtook me and left such a cloud of dust that I was blinded for a moment and rode full speed into a ditch. The forks of my machine,

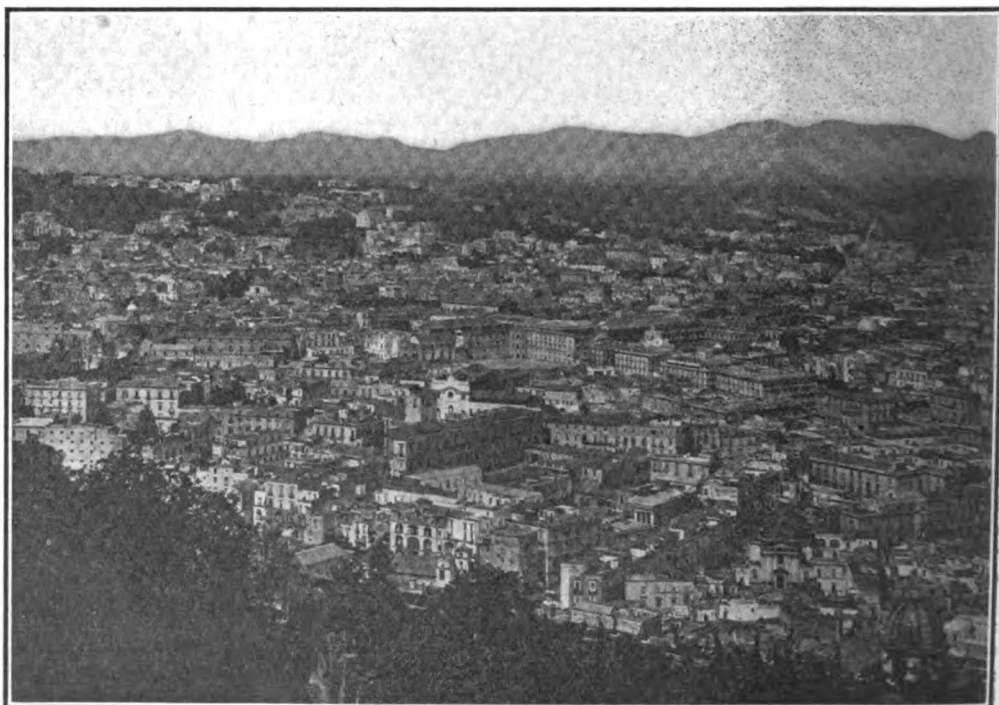
already weakened by many falls, split at the axle and the gasoline filler on the tank broke off.

Roads Poorly Marked.

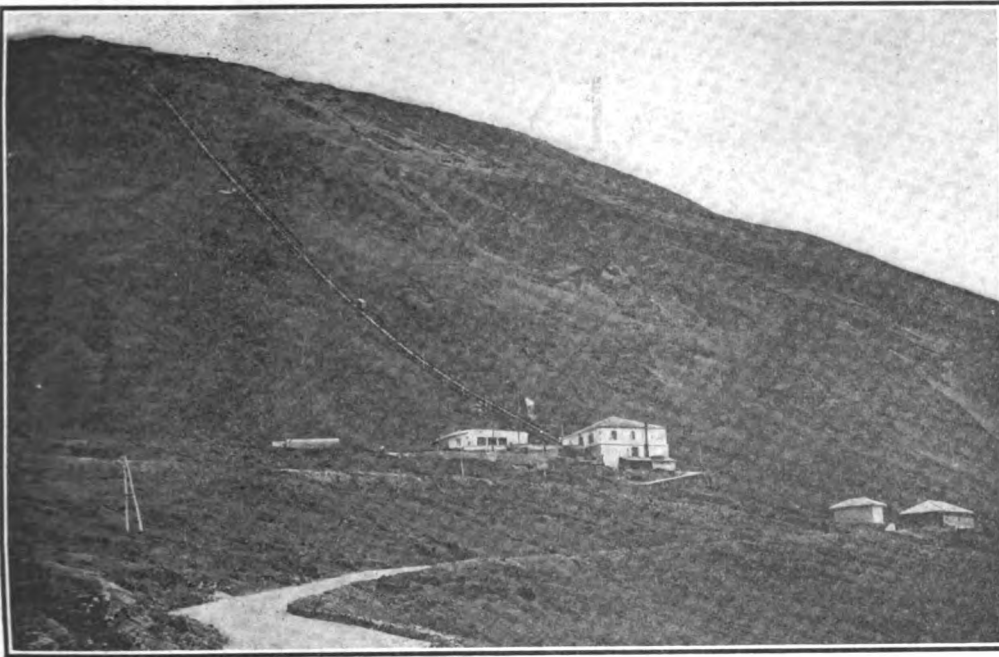
I finally proceeded to Poggia Rusco where I found a mechanic. I showed him my purse, containing one lira and seventy-five centesimi, told him that was all the cash I had and asked him if he would repair my machine for it. He laughingly agreed. At noon a young merchant who happened to be in the shop, invited me to his home for dinner, where I enjoyed a hearty meal.

At 4.30 p. m. my machine was ready and I continued to Bologna, passing through Mirandola and San Felix. I was directed by shorter and poorer roads through Cuorleone and San Giovanni, where it is difficult to keep to the route on account of the many crossroads, with no directing signs. In Bohemia a large stone with the names of the towns painted on it shows the traveler which course to take and in Styria and the Tyrol, iron posts carry signs giving full directions. When I reached Bologna I was still unable to get my American money order cashed. Fortunately I had some American gold for which I obtained Italian money.

The next morning I bought four and a half kilos of gasoline at eighty centesimi a kilo, this being a much better and cheaper way than buying by the litre. I then started on as hard a run as I ever hope to make. The Patiossa Pass was bad going and I had to push nearly all the way. Liberal doses of gasoline in the



A Bird's-Eye View of Naples.



Famous Funicular Railway, in Italy.

clutch and cleaning spark plugs helped a little. Then came the La Futa Pass, which almost caused me to give up. The country here is wild, barren and mountainous and the roads are very poor.

Repairs in Florence.

I reached Florence about 3 p. m. and was escorted to Cook's, a money exchange, by an English-Florentine. On the way he told me there was an Indian representative in Florence and directed me to his shop. I lost no time in visiting him and he soon found the difficulty in the slipping of my clutch. He made repairs and after a test I was glad to pay him twenty-five lire, or \$4.83. While he was working on the clutch I made some minor repairs and soon had the machine in fine order.

I left the city for Silnna by the Porter Romana, and with my engine running well again traveling was a pleasure. From Silnna, a city of ups and downs, I took the Val di Chiani road to Cortona. The country in this section is very hilly. All the towns along my route were located on peaks or along mountain sides, this being done in olden days as a precautionary measure in case of war. Among the towns referred to are Cortona, Perugia, Terni and Naples. The road descends from Cortona to the beautiful Lake Thrasymene and passes on to Magiore with its forts and walls; thence through the Val di Chiani to Perugia and under the ledge of the bold rock upon which the town of St. Francis of Assisi is perched.

Foligno, Trevi, Spoleto and Terni were passed and then I rode along the River Tiber to Campagna and Rome. I put up for the first night at a lodging house, but the following day obtained a room at the Hotel Trevi. There are numerous delightful excursions for the tourist from Rome, such as along the Appian Way, which passes by old aqueducts, Roman tombs and many ruins, to Frascati, and thence to Tusulurn, Cato's birthplace. It is in this section that one sees some of nature's masterpieces and the motorist will find something worth while all the time he is there. Rome is well cut up with canals which sometimes take the place of streets.

The road from Rome to Frascati (not the Via Appia) is the worst I have ever seen. From Frascati south to within three miles of Velmontone it is one mass of stones; there it improves through St. Agatha, Fernetino, Frosinone and Cyprano to Aquino, Juvenal and Cassino. After passing through other small towns I climbed for an hour and a half to reach the monastery; it is possible, however, to make it on a motorcycle. Near Cyprano are the falls of the Liris and Cicero's villa. Here a man wanted to charge me one lire and twenty-five centesimi per litre, or \$1.20 per gallon, for gasoline. A native advised me to get it nine miles further on, but the distance was twenty-one miles and just a half mile from Cassino my fuel gave out and I was towed into town by a passing team.

Gasoline Comes High.

In Cassino I was obliged to get gasoline at 86 cents per gallon, and throughout my stay in Italy found the price of fuel almost prohibitive. A few miles from Cassino I stopped for the night at an inn at Osteria. The proprietor was an Italian who had worked in London and therefore could speak English. A good supper, bed and breakfast cost me three lire. The next morning I continued on to Caianello and Teono and to Capua over poor roads. Bicycling is very popular in Italy, but motorcycles are rather scarce and they are very unpopular with the horses and mules. In crossing a railroad track outside of Teono I met a heavily laden truck drawn by a mule, who upon seeing my machine became frightened and jumped to one side of the road; the truck slid down, struck a telegraph pole and turned turtle with the mule dangling in the shafts.

From Capua to Naples the road was even worse than from Rome to Frascati. It was a mass of bumps, ruts and stones covered with dust two inches deep. My engine was going in spasms and gasping and the carbureter was full of dust and would not operate properly. I proceeded to Naples and then along the rough stone-paved streets to Resina and Torre del Greio; to a point within three miles of Castellommare-Stabia the road was bad.

While I was riding behind a carriage in one

of the narrow streets of Castellommare, a boy ran out of a doorway and darted in front of me. He fell and became wedged under my engine. His mother picked him up and then began pulling at my clothes so that I thought she would pull them off and at the same time screaming at the top of her voice. It did not take long for a large crowd to gather about me and from their menacing looks I figured I was in for trouble. Just as some of the boldest were about to begin action six gendarmes rushed up and without explanation marched me off to the city hall and locked me in.

It was not long, however, before they received news that the child was not injured, whereupon I was released and escorted to the home of a friend by one of the gendarmes. I do not know whether he was sent along as a matter of courtesy or protection. I stayed at my friend's house for some time, cleaned my carbureter and took many short trips to nearby towns and cities. In the carbureter I found sand, grit and plenty of water; the gasoline that costs so much in Italy is well watered. One of the most remarkable excursions I have ever taken was to Posilippo, along the sea and past the islet of Nisida where I saw some beautiful scenery and some of the oldest Roman and Grecian historic ruins.

(To be continued)

OPPOSING UNREASONABLE TAX.

CALIFORNIA motorcyclists are endeavoring to down the proposed tax that several counties plan to levy, and as a result a campaign has been inaugurated to have the members of the next session of the legislature pass a state registration law that will protect the riders from paying special fees when riding from county to county. As it is the riders are forced to pay a fee of \$2 in order to ride in Golden Gate Park and a similar fee in Los Angeles. It is now intimated that Oakland, Berkeley and several other cities are planning to pass like ordinances which would require a small fortune for the rider to ride in various towns.

ON TENNESSEE ROADS.

PATHFINDING in Tennessee is anything but a soft proposition, according to Frank Crayton, who forwards the photograph below, and Crayton should know whereof he speaks, in view of the fact that he has recently been appointed district manager in charge of a



squad of pathfinding motorcyclists in the employ of the Scarborough map-publishing company, of Indianapolis. The accompanying picture affords an idea of the country through which Crayton has been piloting his Harley-Davidson of late.

SOME EXCUSES *I have heard*

Transcribed by
L. L. GOODMAN

by The MOTORCYCLE COP

"Of all the excuses I have ever heard," said George Stone, the popular Indianapolis motorcycle policeman, in recounting some of his experiences, "the one I bumped into last week is the most original. The motorcycle speed fiend in question asserted that he thought I was a holdup man, and that he was trying to escape me. However, there are many other novel excuses.

"The speed limit in Indianapolis is 15 miles per hour, and all the cases I mention, of course, refer to violators of the speed ordinance. My advice to motorcyclists who are fond of speeding is this: If you are not absolutely certain you can lose the policeman who is chasing you slow up quickly instead of 'hitting her up.' In that way you may get off with a minimum fine, for the price we charge in Hoosier Town for educating speedsters is a dollar a mile; that is, miles per hour and costs. For example, if a man is caught traveling 40 miles an hour he is fined \$40 and costs, which make \$50 altogether. Most riders, therefore, find that it pays to keep within the speed limit. However, I'm getting off the subject.

How the Judge was Impressed.

"Now, the rider who said he thought I was a holdup man didn't live in the country, as you might think; he was a citizen of Indianapolis. He was going 46 miles an hour when I finally caught up with him, and I had chased him nearly a mile. He was twice my size and shouldn't have been afraid of me even if I had been a robber. The excuse didn't go well with me so I took the rider down to see the judge. Strangely enough, however, the story impressed His Honor in court the next morning, and it saved the offender \$41. It was the first excuse I ever heard that was good for anything like that amount. The judge was lenient with the rider and assessed him just \$5 and costs, or \$15 altogether, when it should have been \$56. That man was a clever talker.

"Probably by the time the 'I-thought-you-were-a-hold-up-man' excuse breaks into print, it will have become even more popular than the one which is worked overtime nowadays, namely, 'my throttle was stuck.' It really is remarkable how many speedsters have trouble with their throttles and can't stop. Not long ago, while I was riding through the streets looking for speeding offenders, a motorcyclist shot out from a cross street and I turned quickly and followed. The rider looked back and saw me, and knew that I was a motorcycle policeman even though I was wearing citizen's clothes, which, by the way, I always wear. The chase was a long one, and I had a hard time overtaking the rider, since we had the same kind of machines. Finally I drew up beside him and flashed my badge.

"'Stop!' I ordered.

"'I can't stop!' he cried. 'My throttle is stuck!'

"'Throttle or no throttle—stop!' I shouted again.

"On this second order he stopped all right, and quickly, too. I have known some riders who said they were 'adjusting their carburetor,' and that their 'throttle was stuck,' and they couldn't stop until I gave them the third command; but most of them get their throttles in great working order at the second order. Only once did I have to use stronger measures to stop a throttle bluffer. After I had asked the offender for the third time to halt, I pulled my gun and threatened to shoot his tires. Then he stopped. He was going close to fifty miles per hour, so his fine was about \$60 when the costs were figured in.

Calling a Doctor's Bluff.

"Generally speaking, physicians are the most frequent offenders. They often abuse their privileges. Motorcycle officers usually make allowance for the speed of doctors on emergency calls, but they won't stand for anything unreasonable. I stopped a physician one day who is a motorcyclist; he was making 42 miles an hour.

"'Where are you going at such a pace?' I asked.

"'Why—er—I'm answering a hurry call,' he replied.

"'All right,' I said, 'I'll just go along with you, and when you finish this call you can take a ride with me.'

"Well, we made the call together, and when the doctor went into the house to see his patient I followed, just to see how urgent the case was. Here's the funny part: there was no one ill at all in that house. The doctor lived there himself, and was just going home for lunch.

"'I don't see anybody dying in this house,' I said, after I had looked around.

"'No, you see, I—' he started to frame up an excuse. 'Now, say, old boy,' he went on, 'you see the position I'm in. You were smarter than I thought you were.' We left the house together. Then came an attempt to bribe me.

"'Say, Mr. Stone,' he pleaded, as we left the house, 'I hate to appear in court. Now I don't want you to take me in the wrong way, but couldn't you use a good suit of clothes?'

"'Sorry, sir,' I answered, 'I'm not on the market.'

"I think altogether it cost the doctor \$52. It should have cost him more, but I didn't report the last offense—the attempt to bribe me. Bribes fly thick and fast at the motorcycle policeman, and some of the offers are very tempting. However, I have found that it pays to turn them down.

One Offender's Lucky Escape.

"Only once do I recall that a motorcyclist escaped after I had given chase. It was a thrilling race, and I was within ten feet of the speeder—almost had him in my grasp—when bang! my chain broke. I called a repairman and I never saw that rider again. I probably wouldn't know him if I did see him, as I ate dust for that whole trip. However, this experience shouldn't lend any encourage-

ment to riders, for the offenders seldom get away. Our motorcycles—I speak of the officers' machines—are kept in racing trim, so naturally we have the advantage when it comes to a sprint.

"The nerviest speed fiend I ever encountered was a motorcyclist. After I had brought him to bay, we stopped and had a talk. He tried to work on my friendship.

"'Come on, Stoney,' he said, 'let me go.'

"'Nothing doing. Turn around and come with me, old boy,' I said. 'We are going down.'

"'All right,' he said, as he jumped on his machine. 'Let's go.'

"Well, that rascal started out faster than ever, and when I started to chase him again I found that I was out of gasoline. He had turned it off while we were talking! By the time I got the gasoline running well again the rider was a quarter of a mile ahead, but I got him all right, and when he appeared in court the same afternoon he found the trick a costly one.

Playing a Risky Game.

"I want to tell just one more story before I quit," said Officer Stone to the scribe. "It concerns an accident I had late last year which nearly put me out of business. I was running 55 miles an hour after a motorist and was gaining rapidly. When I was within one hundred yards of the speeder I began to watch my speedometer. When I looked up again I saw something that scared me green. There was an automobile standing in the middle of the street just about eighty feet ahead of me! I was too close to it to get out of the way, although the motorist had passed around it, so I put on my brakes with full force. My motorcycle skidded 70 feet, and then came the crash. My machine was smashed to pieces, a fender and one front wheel were torn off the automobile, and as for myself, I went sailing through the air fifteen feet off the ground. I went clear over the automobile, and when I came down—well, I don't exactly remember that part.

"The boys say they took me to the hospital in the police emergency wagon, and that I raved for two weeks. At any rate I didn't make another arrest until six weeks later."

OFF FOR LOS ANGELES.

HUGH FARGO, a writer and photographer, and Charles Crawford, a motorcycle salesman, left Atlantic City, N. J., on September 19, on a Henderson motorcycle, riding tandem, for Los Angeles. They carry a message from the mayor of Atlantic City to the mayor of Los Angeles. One of the objects of the trip will be to transact Henderson business at points along the route.

MR. AND MRS. E. A. MCCARTHY, of St. Joseph, Mo., made a trip to the Indian factory at Springfield, Mass., recently, when Mr. McCarthy contracted for his next season's allotment of machines.

**MOTORCYCLE
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J. LEO SAUER,
President

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COMMENT**

Paid Circulation, this issue, 12,270.

THURSDAY**OCTOBER 17, 1912**

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1879.

H. N. CONDUCT,
Secretary

LIGHTWEIGHTS.

A DISCUSSION recently taken up in England as to whether extreme lightness or power should receive first consideration in the manufacture of ladies' motorcycles brings us to a realization of the fact that not the slightest concession is now being made in this country to provide women riders with a solo mount adapted to their needs. That this is a proposition which must be approached gingerly goes without saying, but we believe the American field has developed to the point where certain minor refinements in the lighter models may at least be considered, in the interests of the ladies. Several years ago both the Reading Standard and the Wagner companies marketed light, drop-frame singles, rating somewhere inside three horsepower and quite equal to all the requirements of feminine enthusiasts, but sales of these models were comparatively few. It is only fair to admit, however, that these machines were launched at a time when the woman rider was a rara avis, and when public sentiment was set sternly against her. Times have changed and the feminine pilot of the solo mount is now coming into her own. It is obvious that even the lighter singles—of standard design—do not meet her requirements, but at present she must either content herself with these or forego solo work. What are we going to do about it?

HILL-CLIMBING LULL.

WHAT has become of the motorcycle hill-climb on this side of the Atlantic? The season just closing has developed very few events of this character, and these it must be admitted were staged with considerable indifference. Some time ago hill-climbs were found fairly well sprinkled throughout a season, and that they contributed not a little to the practical advancement of the motorcycle is certain. While we have been giving hill events a nonchalant go-by in this country our British cousins have been making the most of them.

Your Englishman wants every ounce of sporting interest out of an event to which he gives his serious attention, and the hill-climb—combining speed, sensational cornering and all the elements of keenest competition—meets his requirements. We have hills aplenty on this side and machines to climb them. All that is needed is systematic arranging and handling of programs. The hill-climb has never been given a fair run for public favor in the United States, and F. A. M. clubs might well give this phase of the situation careful thought.

**AFFIDAVIT OF
OWNERSHIP AND
CIRCULATION**

In compliance with the provisions of an Act of Congress adopted August 24, 1912, the publishers of **MOTORCYCLE ILLUSTRATED** have filed with the Post-Office Department the following affidavit of ownership and paid circulation.

Editor, J. Leo Sauer, Westfield, N. J.
Managing Editor, J. Leo Sauer, Westfield, N. J.

Business Managers, J. Leo Sauer, Westfield, N. J., and H. N. Conduct, East Orange, N. J.

Publisher, The Motorcycle Publishing Company, Incorporated, of New York.

STOCKHOLDERS.

J. Leo Sauer, Westfield, N. J. 28 shares
H. N. Conduct, E. Orange, N. J. 21 shares
J. J. Donovan, New York, ... 1 share

There are no bondholders, mortgagees or holders of any other securities.

Average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to **PAID** subscribers during the six months preceding the date of this statement. (This information is required from daily newspapers only)... 11,375

The above figure only includes copies sent by mail to paid subscribers, and copies **PAID FOR** by the American News Company. Sample copies and American News Company's returns are not included.

Sworn to Sept. 30, 1912, by H. N. Conduct before G. J. ZENGERLE, Notary Public.

N. B.—MOTORCYCLE ILLUSTRATED is the only paper in this field which has filed with the postal authorities a sworn statement of its net paid circulation average during the past six months.

The **NET PAID** circulation of the current issue of **MOTORCYCLE ILLUSTRATED** is
12,270 Copies.

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Distributed as follows:
Mailed 7,805
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Office Use, etc. 95
Total 14,200

DEDUCTIONS.

Amer. News returns, two weeks.... 1,450
Complimentary copies and office waste 450
Total deductions 1,900

SUMMARY.

Press Run 14,200
Deductions 1,900
Paid Circulation 12,270

BETTER PROTECTION.

DURING the last month no less than a dozen minor accidents, due primarily to the riders taking unfamiliar turns at speed, have emphasized the necessity for a movement looking to more adequate protection for motorcyclists at danger points. That every turn should be made cautiously goes without saying, but the roadster who coasts down a long, smooth hill, for example, is quite likely to take conditions for granted until it is too late to avoid a spill and possible injuries. A distinctive warning sign placed at the top of the grade would at least put him on guard. Automobile organizations have posted many danger points in this way, but usually only on main touring routes; besides, the experienced motorcyclist is apt to disregard an automobile sign in the belief that his single-tracker is capable of negotiating many a corner that would give a four-wheeler trouble. In other words, a warning for motorcyclists must be aimed directly at them, if it is to serve its purpose.

ULTIMATELY the posting of these signs with special regard for the requirements of motorcyclists, will come within the province of the F. A. M. Touring Bureau, but some time must pass before the Federation will be enabled to take up this task on a systematic basis. In the meantime, it would be well for clubs throughout the country to assume responsibility for the posting of signs at the more deceptive danger points in their respective districts. Two or three such signs could be carried on a club outing or sociability run and placed where the riders found greatest need for them along their route. In this way all bad turns, blind roads, bridges and railroad approaches in a given territory would soon be marked for the benefit of touring motorcyclists. In time it will be the aim of the F. A. M. Touring Bureau to adopt a standard and distinctive sign for this work, but for the present clubs could follow any design calculated to attract the eye of a passing rider, the primary purpose being to impress upon him the knowledge that there is danger ahead, for the motorcyclist as well as the automobilist.

A LAUDABLE MOVEMENT.

DURING the last week in September more than 200 guide posts were placed along the roads leading out of Indianapolis. This was done by the Oakland Motor Company, through the efforts of its Indianapolis manager, George O. Wildhack, who is familiar with danger points near Indianapolis.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

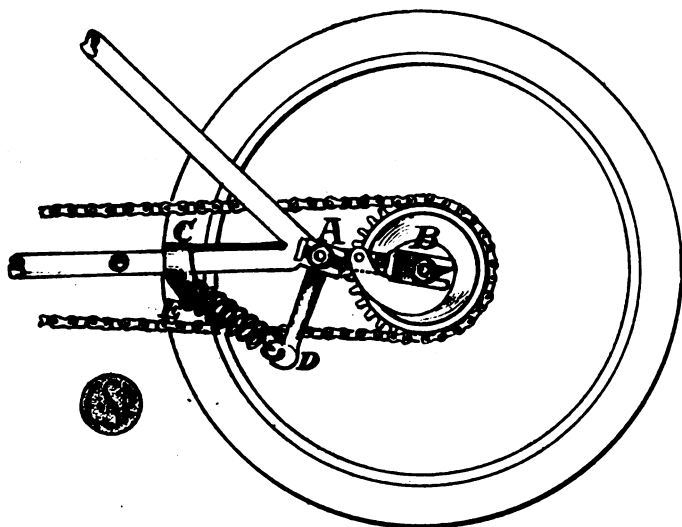
Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.



SPRINGING DEVICE.

THIS arrangement can be fitted to any motorcycle. Rocker DAB is pivoted at A and this pivot is integral with the brace CA. A stiff coil-spring ED takes up all road jolts by allowing a restricted vertical motion of the rear wheel. From ED is also connected a strong, flexible steel cord, which, although idle when the spring is in proper condition, will prevent the rear tire and mudguard coming into contact should the spring break. To attach this device to any motorcycle, the rear mudguard and stand need to be altered, but the added comfort, it is claimed, should make it worth while. Contributed by Charles S. Price, Rutherford, N. J.

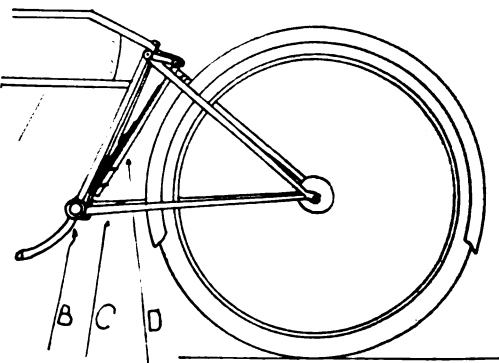
SPRING SUSPENSION.

UNDERSLUNG frame with semi-elliptic spring suspension is shown in the figure. The front fork FF is made extra heavy and bent as shown to attach the spring S to its

end and by a shackle H at the rear end. The front axle, FA, is attached to the center of the spring S. In the rear construction, the combined stays have a turned-up end and this and the shackle H carry the rear semi-elliptic rear spring SS. There are thus two springs to the front forks and two to the rear, causing easy riding. Contributed by Van Wharton, Fairbury, Ill. Wharton's idea, illustrated at the bottom of this page, is but one of many suggestions of this character, demonstrating that there is quite a demand for rear-sprung frames.

SPRUNG REAR FRAME.

TWO tubes, one on each side of the seat mast, run to the crank hanger and form a double triangle distinct from the main frame in this idea. At B is the crank-hanger which connects the triangle construction with the main frame. D is a leaf spring clamped at the bottom to the seat mast and the end attached to the top of the double triangular construc-



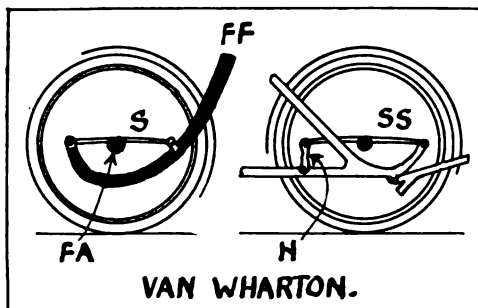
tion by a link. This arrangement gives a rear spring-frame. Contributed by Fred. Andregg, Hoxie, Kan., and illustrated above.

SPECIAL FUEL MIXTURE.

HAROLD R. SHOEMAKER, of Syracuse, N. Y., gives a lubricating pointer in the following letter:

Occasionally one hears a discussion with reference to using lubricating oil in the gasoline for the purpose of oiling the motor, and the idea is worthy of serious thought. A few engines are now being thus oiled, but the plan is of doubtful value when applied to the ordinary four-cycle motor, excessive carbonization sometimes occurring. I have, however, observed the results of a certain fuel mixture for over 400 miles of varying roads on a single-cylinder high-speed motor. This mixture is made up as follows: four tablespoonfuls of engine oil and two of kerosene to one gallon of gasoline. This should be mixed well and strained through chamois. The motor should also be oiled as before.

With this mixture the motor appears to run more quietly and smoothly and there seems to be a slight increase in power. Better cooling

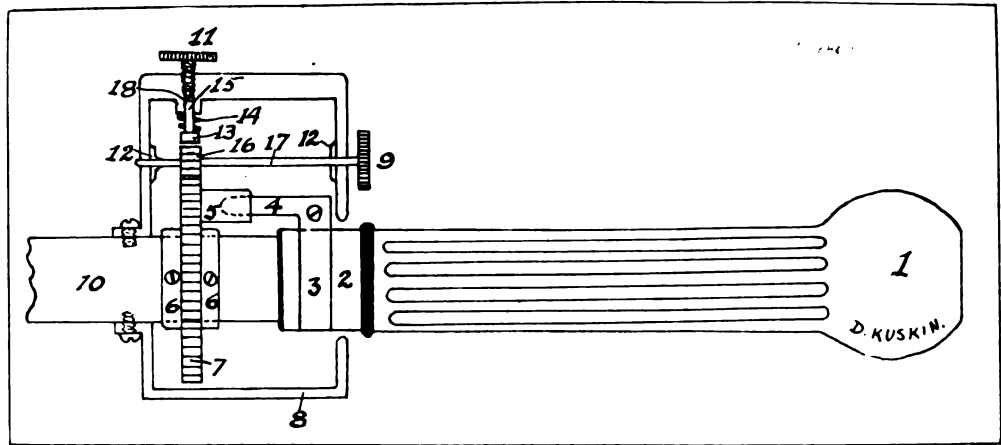


VAN WHARTON.

is also effected. In my case, at least, the results obtained will warrant my continuing to use the special mixture.

SAFETY GRIP CONTROL.

TO avoid losing control of the machine when fitted with grip control, the following device is submitted. It enables the rider to limit the opening of the throttle from zero to any speed desired with the surety that it cannot be turned accidentally other than toward the closed position. A metal strip 3 has a projection 4 at one end, the whole being fastened to metal piece 2 on the twisting grip 1. Clamped between two discs but free to revolve between these discs 6 is a gear 7 with an arm 5 extending to one side. The whole is fastened to handle-bar 10. A small gear 16, mounted on shaft 17, with bearings 12, is connected to gear 7. This shaft has a milled head 9. A flat piece 13 on a square rod 15 slides up and down in a slot 18; this is under control of a screw piece 11. A spring 14 keeps 13 from coming into contact with 16. The contrivance is lowered by turning 11 to the right.



In operating the control, suppose the grip is turned to the right. Turn 9 to the left until 5 contacts with 4. Turn 11 to the right and 13 settles between two teeth on 16. This locks gear 7 so that the grip 1 cannot be turned to the left. This acts as a lock on the machine. Other methods of setting with the above can

readily be figured out. Contributed by David Kuskin (Bronx), New York City.

J. F. CUNNINGHAM and F. M. McClure, of Kansas City, Mo., have adopted the motorcycle for their work in the department of public welfare.

NEWS OF GLOBE-GIRDLERS

LATEST reports are to the effect that Mr. and Mrs. Humphries, who are attempting to circle the globe on a motorcycle, have left Vancouver for the eastern coast, but it is as yet undecided whether they will head for New York or some more northerly city. Thus far their road hardships have not been particularly severe, although they have traversed some of the worst roads in the Rockies. They have been forced to abandon the trailer used at the start of the trip, and all luggage is now carried on the machine. Mrs. Humphries uses a tandem seat.

HAPPENINGS IN NEWARK.

THE Bush & McDougall Company, of Newark, N. J., has been appointed Harley-Davidson agent for Essex county. It now handles the Harley, Thor and Henderson machines.

Paul Derkum, manager of the Newark Motordrome, was tendered a farewell dinner at the Kreuger Greisenheim, on Saturday evening, October 5, before he left for Los Angeles.

The third annual dance of the N. J. M. C. will be held at Oraton Hall, Newark, on December 4, and all nearby clubs in New Jersey and New York have been invited to attend.

Walter Goerke, local Indian chief, and Roy S. Pascall have formed an organization called the M. G. A. R., meaning Motorcyclists' Grand Army of the Republic. All riders who have been crippled so that they are permanently barred from racing are invited to join. No dues will be charged. Jake DeRosier has been elected an honorary member.

NEW COFFEYVILLE SHOP.

R. E. McCULLOUGH, Indian agent in Coffeyville, Kan., has just finished equipping an up-to-date repair shop which offers riders many of the advantages of garages in the larger cities. The shop has been selected as the meeting place for the Coffeyville M. C.

ABOUT thirty motorcyclists of Columbus, Ind., recently made a run to Nashville, Brown County, and were joined by riders from the neighboring towns en route.

ANTI-RACING ORDINANCE

Steps Have Been Taken to Hasten Adoption of Measure Prohibiting Motorcycle Contests in Newark.

NEWARK, N. J., Oct. 12.—An unsuccessful effort was made tonight to have a special meeting of the Common Council called for the purpose of hurrying action on the ordinance now pending to prohibit motorcycle racing here. This followed the death of Daniel Barnett, whose son William was killed at the Newark Motordrome on September 9 by Eddie Hasha's machine. It was argued that Mr. Barnett's death was hastened by grief over the death of his son, and the Vailsburg Improvement Association sought to use this claim to hasten action on the new anti-racing ordinance. When a petition for a special meeting was presented to Mayor Haussling he made the following statement:

"I have not the slightest doubt that the ordinance to prohibit motorcycle racing here will be adopted by the Council, and if it should not the Council will hear from me in a way that will not be pleasant. However, I do not see that we are likely to secure the adoption of the ordinance any earlier by calling a special meeting against the obvious wish of the body that must adopt it. My promise holds good to prevent any motorcycle racing until the Council has had an opportunity to act."

The ordinance has been taken up on second reading and will not come up for final passage until after the election for mayor, and it is assumed that nothing but politics can prevent the closing of the Newark bowl. It is pointed out, however, that if the ordinance is passed it will always be subject to recall.

NEWARK, Oct. 15.—It was announced today that Mayor Haussling has called a special meeting of Council for Friday evening, October 18, for the purpose of passing the anti-racing ordinance on its final reading.

A 69-MILE jaunt was recently enjoyed by 25 members of the Freeport (Ill.) Motorcycle Club, twelve of whom finished with perfect scores.

ENJOYED NEW ENGLAND TOUR.

CHARLES M. FARRELL, of Newark, N. J., and William Hirsh, of Elizabeth, N. J., two M. M. enthusiasts, have just returned from a two weeks' tour of the New England States. They report the roads in excellent condition. They stopped in all the principal cities and visited the M. M. factory at Brockton, Mass. Good roads were found in Massachusetts, excepting the Boston road, which was in bad shape and they advise tourists to go by way of Tarrytown, N. Y., to Danbury, Conn., and then through Connecticut.

ROUTE-MAPPERS BUSY.

CHARLES W. SCHMATT, of Cedar Rapids, Iowa, and Harry McNeer, of Jackson, Ohio, members of the Scarborough Company's road map force, have been doing considerable riding lately on their Harley-Davidsons. McNeer, who has traveled through Iowa, Tennessee, Missouri and Kansas, has covered 8,500 miles.

A STURDY PATHFINDER.

H. A. STEWART, pathfinder of the Scarborough Company of Indianapolis, Ind., on his cross-country trips for the purpose of mapping routes, uses Fisk motorcycle tires and states that he has obtained excellent service from them. The tire question is an important one with Stewart as he rides in all kinds of weather and does not always meet with good roads.

A NEW road has been built between Independence and Arkansas City, Kan.



Pathfinder H. A. Stewart.

QUESTIONS and ANSWERS

IF previous questions in this contest have been difficult to judge, those answers relating to Question No. 6 have been particularly so, and the awards which have been made had to be considered on the very finest points in each case. There were nearly a score of answers. Most of them covered the entire question, but others neglected to give proper methods for replacement and thus spoiled their author's chances for prize-winning. The first prize goes to B. A. Waltz, 1921 Ford Building, Detroit, Mich. The second is awarded to Livingston Fountain, 318 West Eighty-eighth street, New York, N. Y.

Below are printed Questions No. 7 and 8. Answers to No. 7 will be published in the October 31 issue, and those for No. 8 will be found in this department on November 14.

The decision in each case will be made by the Editor of this Department, and prizes will be awarded to the two readers whose replies are most satisfactory. Answers will be published the *second* issue following the number in which each question is asked. We cannot guarantee the publication of any answer received more than three weeks after the first publication of the question.

For a time the questions will be of a general nature, having to do with fundamentals. Later, however, problems of a specific nature will be considered. In this connection readers of MOTORCYCLE ILLUSTRATED are requested to suggest questions which they would like to have their fellow-riders answer.

All communications should be addressed to: "Editor Questions and Answers, MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York."

Question No. 7. Explain the operation of the inlet and exhaust valves.

Question No. 8. Describe the action of a three-port, two-stroke motor.

FRANK

MERRITT

REMOVING AND REPLACING PISTON RINGS.

THE first prize in this contest was awarded to B. A. Waltz, of Detroit, Mich., whose answer was as follows:

"The best way to remove piston rings from a motorcycle piston makes use of the old tin-strip method in a slightly modified form. First clean the piston surface between the rings, and after seeing that the rings are loose in their respective slots, pry out an end of the top ring, or the one to be removed, and slip the small strip of brass behind it a short distance from the end.

"Follow this with a sheet of stiff paper, which is moved around the circumference of the piston to keep the ring from re-entering its slot, as the strip is moved around and forces the ring free. When the other end of the ring is reached and the strip of metal is removed, the ring is easily slipped off the piston over the paper sleeve.

"The replacing is more simple. Make a sleeve of the paper before used, wrapping it around the piston snugly. Slip the rings over this sleeve and the top of the piston to their respective slots. The power edge of the paper is to be located just above the slot into which the ring is to be inserted, so that the rings above are not in the way if they are already in place."

The answer given by Livingston Fountain was awarded the second prize. It is as follows:

"After removing cylinders secure four pieces

of spring steel about one-half an inch wide and one-sixteenth of an inch thick. Open the ends of a piston ring and insert one of the steels. Gradually work this around to a point nearly opposite the point of entry. In the same manner enter the other three pieces and move them around to points equi-distant from each other on the circumference of the piston. The ring may now be slipped off the cylinder with the fingers.

"To apply the rings again, secure a piece of soft iron about three-quarters of an inch in width and one-eighth of an inch thick. Cut in half and shape each half to 180 degrees of the circumference of the cylinder. Bend the four ends of these strips so that they are at right angles to the face of the cylinder. Drill a hole of say one-quarter inch diameter in the ends of each strip as near the bend as practical. Connect the two strips at both ends with bolts and nuts. Replace the rings by the reverse of the method of removing them. After the rings are in place, apply the clamp just made to the top ring, so that it holds the lower half of the ring and the upper half projects above the clamp. Tighten up on the two bolts and the clamp will compress the ring so that the cylinder will slide easily over the part that projects. Remove the clamp and proceed in like manner with each of the rings in succession."

Honorable Mention.

Honorable mention is given the answer of R. C. Newman, of Chicago. His answer was: "The best way to remove piston rings is to

first expand the ring, by forcing a thin narrow strip of steel between the diagonal lap where the ring is cut through, and twisting this strip. This will spread the ring at the lap. With one hand, keep the lap open and with the other insert a thin narrow metal strip between the ring and the piston. Insert four other strips, one after the other and work each around to the following positions; one opposite the lap, one on each side of the lap, two opposite each other and 90 degs. from each end of the lap. These strips run the length of the piston and project over the top of it. The ring will then be expanded so that it can be slid off over the top of the piston.

"To replace the rings, tie a piece of string tightly around the piston below the grooves and another above the grooves. Insert the same strips between the piston and strings and in about the same position as when removing. Allow the strips to project above the piston head. Slip the ring over the strips and slide it down same with the lap in the same position relative to the strips as when removing it. The ring can then be slid over its proper groove and held there with one hand while the strips are removed with the other. The ring will then spring into its groove. The strings are cut away, after all the rings have been replaced."

Another answer worthy of honorable mention is that of Van Wharton, of Fairbury, Ill.

"Piston rings may be removed with the piston in position on the connecting rod or they

may be removed when the piston is free from the connecting rod. To remove the rings secure four or five strips of some thin metal, as tin, about 2 inches long and $\frac{3}{8}$ inch wide. At a point opposite the opening in the top ring, press the ring into its groove as far as possible so that the opening of the ring will protrude beyond the piston. At the opening of the ring insert the strips of tin, and work them around the piston until they are at an even distance apart. Then the ring can easily be removed by slipping it over the strips of tin. The second and third rings may be operated on in the same manner, only one must be careful to move the ring all at once, so that it will be square with the piston; not one side and then the other, for in this way the rings are twisted and have a good chance to break.

"In replacing the rings use the same strips of tin and replace the last ring first. It is best to return the same rings to their former grooves. Place the strips of tin around the piston so that each trip will cover all three grooves. Then bend the strips over at the top of the piston so as to hold them in position. The ring can then be slipped over the strips without interference of the first two grooves; when the ring is squarely over its groove, begin working the strips around to the opening in the ring and take them out. This allows the ring to fall into its groove. Replace the last two rings in the same way, being careful to move the rings square to the piston so as not to break them. When all three rings are replaced, adjust the ring in such a way that the openings of no two rings will be opposite."

TOUR FROM WILLIAMSPORT, PA.

F. E. DENTLER.—Motorcycles need no license in New York State, so you can ride on your Pennsylvania license without trouble for any length of time. From Elmira go to Watkins Glen via Horseheads, Pine Valley, Millport, Montour Falls, and Watkins; 23.2 miles, over fair-to-good dirt roads. From Watkins Glen go to Geneva via Hector, Lodi, Ovid, Willard, Dey's Landing. Distance, 41.8 miles over similar roads. From Geneva, follow back over Touring Number Route 48 to Syracuse, beginning at 54.1 Geneva. From Syracuse go to Fayetteville, then to Mycena, and Sullivan to Canastota, about 25 miles.

From Canastota go to Oneida Castle, then to Vernon, Kirkland, New Hartford and Utica, about 25 miles over macadam roads. From Utica take latter part of route No. 28 (beginning at 95.6 Utica) to Albany, 108.2 miles. From Albany take route No. 25 to Pittsfield, Mass., 37 miles. From Pittsfield follow back over route No. 10 to Springfield. From Springfield take route No. 15 reversed to New Haven, Conn. Then follow back over route No. 39 from New Haven to New York City. From New York City take route No. 35 to Delaware Water Gap, then go to Wilkesbarre via Stroudsburg, Bartonsville, Swiftwater, Pocono Summit R. R. Station, Naomi Pines R. R. Station, Blakeslee, Glen Summit, Fairview, Ashley, and into Wilkesbarre, 63.6 miles over varying roads. From Wilkesbarre go to Williamsport via Nanticoke, Shickshinny, Berwick, Bloomsburg, Pine Summit and Muncy, 83.4 miles over fair-to-good mountain roads. From Geneva to Buffalo follow route No. 47. Follow back to Geneva over same route, then go on to Watkins Glen and Elmira. From Elmira go to Williamsport via Southport (N. Y.), Columbia Crossroads, Troy, Canton, Ralston. Maps of New York and Mas-

sachusetts obtainable from the American Automobile Association, 437 Fifth avenue, New York City. You are exempt for 10 days as a non-resident rider in Massachusetts.

HORSEPOWER DEVELOPED.

PHILIP L. ALLISON.—In calculating the horsepower developed by a gasoline four-stroke motor, the following formula is used:

$$H. P. = B^3 L n \times N \text{ where } B = \text{bore in inches; } L = \text{length of stroke in inches; } n = \text{number of revolutions per minute, and } N = \text{the number of cylinders.}$$

For a single cylinder $2\frac{1}{2}$ by 3 inch motor, at 1,400 revolutions per minute, the power will be $(2\frac{1}{2} \times 2\frac{1}{2}) \times 3 \times 1,400 \div 16,000$. This will be equal to 1.64 horsepower. At 2,000 revolutions it will be 2.34 horsepower. At 2,750 revolutions the horsepower will be 3.22. For a twin motor, multiply by 2, or put $N = 2$. You can get the power at any intermediate speeds by putting the revolutions desired in place of n in the above formula.

A four-cylinder motor is perfectly safe to use, and has the advantages of more even and quiet running than most twin motors.

DELIVERY WAGONS.

CHAS. F. HOPINS, JR.—For motorcycle delivery cars write the Minneapolis Motorcycle Co., 517 South 7th street, Minneapolis, Minn.; New Era Autocycle Co., 22 Dale avenue, Dayton, Ohio; Triumph Mfg. Co., 51 East Woodbridge street, Detroit, Mich.; Hendee Mfg. Co., Springfield, Mass., and the Reading-Standard Co., 306 Water street, Reading, Pa.

VARIABLE GEAR AND SIDECAR.

FREDERICK ZEPP.—1—About the only position for a two-speed gear for your machine is in the rear hub, but we cannot advise your fitting one there. The manufacturers of your make of mount will not bring out a two-speed gear in 1913, and have none on the market. Nor will another make fit the drive as at present constructed. Get a 45-tooth rear sprocket; it will improve matters surprisingly in side-car work.

2—The new (1913) clutch will have cork inserts and be metal-to-metal. Write the factory for one after November 1, and in the meantime reface yours with Thermoid, Raybestos or some like fabric. Tighten the clutch spring a trifle. *Don't drive on the clutch*; let it be in or out. A fabric-lining can be put on by any good garageman in a short time, so there is no necessity for two weeks' waiting.

3—The side-car attachment is improperly coupled to the machine. Too much stress is put on the rear fork, hence its "set" to the left. Shift the attachment forward or backward until you can ride "hands off," and keep the front of the side-car frame level or even inclined upward. It it sags downward, the motorcycle frame will be distorted or broken in course of time. Did you attach the car strictly according to directions given? Keep the rear wheel of the machine and that of the side-car vertical at all times, plumbing them when on a level surface.

WALTER EVANS and Roscoe Harkness, of Terre Haute, Ind., have completed a 1,000-mile jaunt through Indiana, Illinois, Wisconsin, Michigan and Ohio on their motorcycles.

ALLIANCE OF THE F. A. M AND C. M. A.

American and Canadian Motorcycle Associations Aim to Co-Operate On Racing and Other Regulations For Mutual Benefit

WITH a view of bringing about a mutually satisfactory understanding between the F. A. M. and the Canadian Motorcyclists' Association, officials of the two bodies recently entered into an agreement relative to the interpretation of competition rulings and general regulations. It has been the desire to standardize racing rules as far as possible, so that there need be no conflict between American and Canadian riders, and this desirable condition is provided for in the abovementioned agreement, which also refers to an exchange of touring courtesies. The agreement, which became effective on October 15, will remain in force for a period of two years. It is signed by President K. R. Spencer, for the Canadian association, and Chairman J. Leo Sauer, of the F. A. M. National Legal Action Committee, and deals with the situation as follows:

"This agreement, between the Federation of American Motorcyclists, represented with full authority by J. Leo Sauer, Chairman of the Legal Action Committee, and the Canadian Motorcyclists' Association, through its President, K. R. Spencer, witnesseth:

"It is understood and agreed by the parties to this agreement that, in order to establish and promote relations of mutual benefit, the following understanding shall be in force beginning October 15, 1912, and terminate two

years from that date, unless this agreement is terminated before that time, as may be done by either party upon sixty days' notice:

"1st. That all F. A. M. racing records, competition rulings and regulations, affecting members of the F. A. M., shall be acknowledged in Canada and that, in turn, all C. M. A. records, competition regulations and rulings, affecting the members of the latter organization, shall be acknowledged in the United States.

"2nd. That, in order to avoid confusion, it is to be the endeavor of both parties to maintain, as far as possible, similar rules for competition.

"3rd. That all touring and other F. A. M. privileges be granted to Canadian riders when in the United States, the C. M. A. to do likewise for F. A. M. members when traveling in Canada.

"4th. That the Canadian Motorcyclists' Association agrees not to accept anything other than a temporary fifteen days' membership from any American rider or club, without the consent of the Chairman of the F. A. M. National Membership Committee; the same to apply to Canadian individuals or clubs who may seek membership in the F. A. M.

"5th. That this agreement be in force for a period of two years, or until terminated by either party on sixty days' notice."



MANY a hotel keeper and restaurant proprietor along the main touring routes, particularly in the Eastern States, might profit by consideration of the fabled goose and its golden eggs. In some districts the bonifaces are reaping a pretty penny from motorcyclists, and not content with this they are prone to send their prices up still another notch when a khaki-clad roadster seeks shelter or refreshments. This is poor policy plus. The rider may pay the inflated price, but he does it in the full knowledge that he is being buncoed, and he will pass a word of warning along to his brothers of the single-tracker. The American motorcycle army is yearly recruiting thousands of riders who must eat, drink and sleep while on tours, and there are honest dollars aplenty to be derived from reasonable consideration of the rider's physical needs.

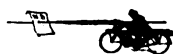
IN other words, the motorcycle goose will lay its golden eggs regularly and cheerfully for the hotel men, provided they do not sacrifice the well-meaning fowl with a view of obtaining all the eggs at once—after the manner of the wooden-pated chap who figures in the fable. The motorcycle field has developed beyond the point where any caterer for public patronage can afford to slight it, and the hotel keeper who attempts to combine high prices and poor service whenever a khaki suit appears on the premises is taking long chances with a source of revenue that is growing in importance daily. One more point: After the hotel men have allowed the egg lesson to sink in they might pass their conclusions along to the owners of automobile garages who are also inclined toward flighty prices where motorcyclists are concerned.



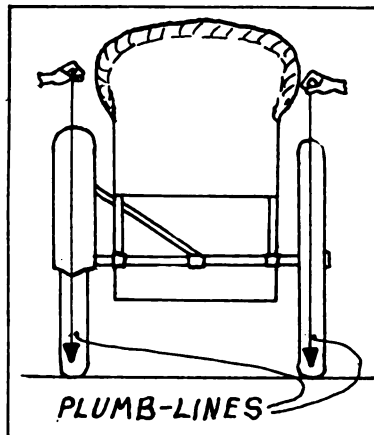
SIDECARS are becoming quite common nowadays, but it would seem that the fitting of the car to the cycle is not always properly done, as the wear on sidecar tires show. The wrinkle is to line up the car and cycle so that when resting on a level piece, both wheels will be plumb-line vertical. Try this out, using a pipe bowl, a wrench or anything fairly heavy on a piece of string, and adjust the fittings to suit. So much for the vertical lining-up. Now get a passenger and ride off; on a straight stretch let go of the bars and see in what direction the outfit tends to turn. If to the right, move the car forward; if to the left, move the car rearward. The position which is easiest on rider and passenger alike, not to mention the motorcycle, is when the outfit will go straight ahead with the hands off the handlebars.

THE proper position for the passenger is leaning slightly backward, with the front of the sidecar horizontal or inclined slightly

upward. This takes a good part of the load off the motorcycle and puts it on the sidecar where it belongs. If the front is allowed to droop forward, the motorcycle takes the most of the load and the frame is strained. The strain on the fittings is increased and in case of a shock they may part suddenly. Such an accident happened recently in my neighborhood, the passenger being hurled out as the front fitting gave way, and landing in a bed of cinders with much loss of skin and temper. The weakening of the front fitting was due to a collision which happened shortly before the accident, but the indirect cause was the strain produced by the drooping position of the sidecar.



SPEAKING of sidecars, in addition to their passenger and package-carrying functions, they have several other uses worthy of mention. One is for demonstrating the pulling power of the motorcycle with the prospective customer comfortable in the "sidie" and the



salesman right at his ear with a persuasive line of argument. A second lies in teaching beginners the operation of the motorcycle, how to get that 200-degree turn of the wrist to drop the valve and advance the ignition in a fifth of a second, for instance. In any case, the instructor is right where he can bring the outfit to a stop in emergencies, from the seat of the sidecar.

But there is still another use. This is for people who want to enjoy motorcycling and yet can't ride solo mounts. By these I don't mean the unfortunate novice who doesn't seem to be able to do anything in the riding line, even when assisted, and is literally afraid of the machine, but the man that isn't quite "as young as he used to be," for example. There are numbers of these possible riders in the country, but the powerful twin two-wheeler is physically beyond them. When they fit a sidecar the story should be different.

THE purchase of a second-hand motorcycle, except from a reliable dealer, is like buying a horse at a county fair; only, in the case of the two-wheeled "bargain" it usually takes some little time for the possessor to realize that he has not got exactly what he set out to get. I know of a number of cases where the purchaser of second-hand mounts figured on getting about \$150 worth for \$100 from brokers in that line of trade, and after getting more like \$90 worth, they raised loud outcries. If the purchaser of a "crock" can prove the bus was sold to him under false pretenses, a threat of action in court will generally serve to bring the flim-flammer around to some compromise or to refunding the money. There are very few genuine crooks in the motorcycle trade today; the rare "bargains" referred to are usually the result of going to someone who does such business on the side, or acts as a broker for somebody else.

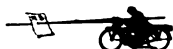
All in all, the man who expects to get \$1.50 value for \$1 is going to get left badly. There are cases where a machine in good serviceable condition is sold for a song by reason of being of an extinct model or slightly out of date, but they are comparatively rare as compared with the "crocks." If you don't mind the appearance of your mount you can get first-class singles from two to three years old at very fair prices; but you may have difficulty in getting repair parts when they are needed. Such mounts can only be found at the shops of agents of other makes, except of course in rare cases, as they have been taken in part exchange. These are the real bargains of the motorcycle trade, and their purchasers do not cry out because they didn't get something for nothing. In and near the Motorcycle Rows of the larger cities you can see these veterans running well on the streets, and the suburban roads are traversed on week-ends by them and their riders. It is needless to say that the latter are not embryo speed merchants, as the mounts can only be pushed to a fair turn of speed. But they get pleasures that the riders of the smart 1912 machines miss, perhaps, in getting the best work out of their aged mounts. Incidentally, I have obtained a number of corking good wrinkles from riders of this class, but I cannot say the same thing about the "latest model" rider as a class, that is, the city edition.



HERE followeth a pessimistic croak. In my travels in and out of the motorcycle districts of various cities I find what appears to be a widespread notion that a dealer makes "good money" by every transaction. This is on a par with the popular idea that automobile manufacturers are all millionaires, and while it may give the dealers in general good repu-

titions for credit, etc., it gives rise to attempts at grafting under the name of "discounts." I believe the clothing houses and cut-rate druggists were the originators of the slogan "retail goods at wholesale prices," but plumbers, hardwaremen, butchers and even bakers think they are entitled to discounts on motorcycle goods and are indignant when they are refused. Here is the usual way the general tradesman endeavors to get his discount out of the "wealthy" motorcycle dealer:

He goes to some paper-hanger, perhaps, who deals in motorcycle supplies on the side and gets a figure from him; then goes to another "dabbler" of the same kidney and gets (usually) a lower figure. Finally, he approaches the regular dealer and prices the article desired. The answer of the grafter to the price quoted is: "Well, I got the figures from — and —, but I came to you, and you ought to give me a special discount." Most times he gets left, but on other occasions he doesn't, and ever after that he uses the figure at which the soft-hearted dealer let him have the goods to cut down every other dealer, all to save a few cents. Even the greenhorn riders in the big cities have the habit and will argue for an hour on the subject. All this is because the dealer is supposed to sit up nights passing his gold from hand to hand and using a reckoning machine to count it.



THE dealer is actually no Cræsus, at least not as far as accessories sales are concerned. Take a well-known accessory, for example. You pay \$5 for it; it costs the factory \$2.10 to make it and another 76 cents to sell it; the jobber has to get his 50 cents profit on it and it takes nearly 60 cents' worth of the repairman's time to put it on. That time is figured on the repairman's weekly wage and not on the hour charge. The dealer pays \$3.60 for it, leaving him 80 cents profit, which

pays his man nearly three hours' salary, and figures out at 19 per cent. gross profit. He puts on one of these a week, say, and "gets rich." Now if he allows ten per cent. discount, he will actually lose 20 cents unless he charges for putting on the accessory; but the makers say "\$5, applied," so a charge for fitting is out of the question. There are lots of little parts that the dealer makes one or two cents on each, and with a discount he stands to get only a fraction of the little copper coin, if any part at all.

If you sit down and figure it out, the dealer must make most of his money on repairs and side-jobs, like baby-carriage work, bicycle repairs or electric wiring; and at that, the most they can figure on is a reasonable sum for the time when they must retire.

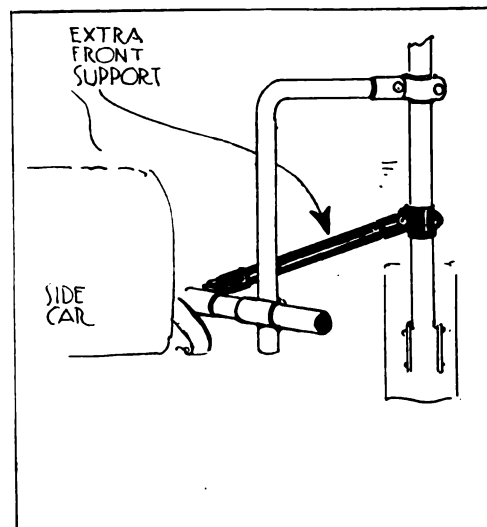
RED REFLEX MIRRORS.

FOR ten years past British riders have been agitating for a Universal Lights Bill, and the movement has continually been blocked by firms interested in the road conveyance of inflammable freights. The technical difficulties were solved by the invention of the Lea-Francis red reflex mirror, a small circular lens mounted on the base of a ruby reflector, which could be clipped to the rear-stays or carrier of a cycle, and would reflect the long distance rays of a big acetylene headlight at 200 yards distance. This was thought to have greased the passage of a universal lights bill into law, but the legislature was so lumbered up with social bills that the lights act could not get through. However, the county authorities have taken the matter up, and local bylaws will compel all wheeled traffic to carry either a red mirror or a red tail-lamp next year throughout many districts. It is characteristic of English ways that at present the motorcar—the only vehicle which is never overtaken—is the only vehicle compelled by national law to carry a tail lamp—a tail lamp, being, of course, a device to safeguard overtaking in the dark.

BRITISHER.

AN ADDITIONAL BRACE.

SEVERAL accidents of late, due to sidecar breakage, in London, England, have moved British designers to seek a more substantial method of bracing the front section of the passenger attachment. One of the suggestions, embodied in the accompanying illustration, provides for an upright arm to be fastened to the front of the car. It is reproduced from a recent issue of *The Motor Cycle*, of London. While there does not appear to be a demand for such additional bracing of sidecars in this country as yet, the idea is worthy of consideration, in view of the fact that it has developed from years of passenger-carrying experience on the other side.



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DELAWARE JUSTICE?

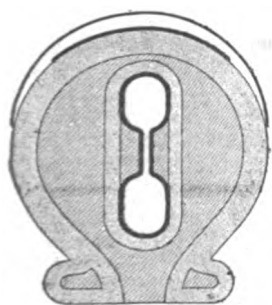
THAT reasonless antagonism to the motorcycle has not yet been eliminated from court proceedings in every State is evident from a letter forwarded by Hugh M. Smyth, of Wilmington, Del., who was recently separated from \$19.85 under conditions calculated to rouse the ire of any motorcyclist. While running through a Wilmington street at 10 miles an hour (figured on a standard speedometer), Smyth saw a pedestrian step out suddenly in front of his machine. He sounded his horn, shut off power and applied his brakes, coming to a stop just as his front wheel bumped the pedestrian's legs. The latter, who had become greatly excited, used some hard language and condemned all motorcyclists to perdition. Then he took the rider's number and swore out a warrant for his arrest.

When Smyth appeared in court the complainant testified that he was unhurt, that the motorcyclist took every precaution to avoid the "accident" and that he was not even knocked off his feet. Still he argued that the rider was making 15 miles an hour, and the judge, after declaring that too much speeding was being done, fixed a fine of \$15 and costs, amounting in all to \$19.85. If convicted on the charge, and Smyth can't see where he was convicted, the fine could have been placed anywhere from one dollar to \$20, but the motorcyclist was given almost the maximum fine despite the fact that he had never before faced a speeding charge.

IN Oregon more than 8,000 motorcycles and automobiles have been registered this year; a gain of 2,000 over 1911.

A VACUUM TIRE.

FROM a Brooklyn (N. Y.) inventor comes the idea embodied in the accompanying diagram of a vacuum tire, which he claims will do away with the puncture bugaboo. The Brooklynite has evolved what he calls a single-tube, wrapped-tread, vacuum tire, the innovation being that the air is pumped out of the interior instead of being compressed into it. The vacuum chamber may vary in size according to the weight that is to be placed upon the tire, and when the weight is applied the chamber tends to widen in the middle, and this



tendency is resisted by the pressure of the atmosphere exerted on the outside of the tire. In this way, argues the inventor, the tire depends upon air for its resiliency, but as the pressure comes from the outside, blow-outs are impossible. Punctures may be sustained, but owing to the construction of the tire it may be used to advantage, as a cushion tread, after being pierced. It is not known how the tire has stood up under tests, but the idea is worthy of consideration.

YOUNG CLEVELAND THIEVES.

WITH the co-operation of local detectives, the police authorities have succeeded in locating a gang of Cleveland motorcycle thieves who have stolen many machines of late. They are all youths with the motorcycle fever and, being without means of purchasing a mount they yield to temptation when an opportunity presents itself for making away with one.

KANSAS CITY MOUNT STOLEN.

C. HANSON, of Kansas City, Mo., mourns the loss of an Indian 7 which was stolen recently. The machine was a single-speeder, No 75-D 912, and a dent in the right side of the tank may help to identify it. Hanson offers a reward for information leading to the recovery of the mount. Communications may be addressed to him at 1406 Grand avenue, Kansas City.

THAYER BAILEY, of Muskogee, Oklahoma, is making a motorcycle trip to Ottawa, Can., and return, a distance of 2,000 miles.

AN ordinance requiring all motorcyclists to carry license numbers costing \$2 per year recently became effective in Marion, Ohio.

Rumor has it that Ray Seymour may be sent to Japan on a special racing expedition.

The SUCCESSFUL DELIVERY VAN

ITS CONSTRUCTION AND OPERATION

D. R. HOBART

PART II.
Further Operating Details
—Lay-Out of Office, Garage and Shop—
Making Repairs—Spare Parts.

HAVING made the survey and chosen the type of vehicle best suited for the service, the next points to be settled concern the station and the *personnel*, or staff. Supposing that the survey shows three cars will be needed at the start, there should be a fourth as a reserve car, and on this basis the station is to be fitted up. The departments in this station will be the office, package room, garage and shop.

The office, which should be located at the front of the station—or on the second floor front if there are two stories to the building—will be fitted with two desks, one for the manager and the other for a clerk and bookkeeper. In addition there should be the necessary files and a map on the wall showing the different districts as in Part I of this article. Adjoining this office is the package room, actually the most important department of the system and one that will tend to accelerate deliveries as the business grows, if properly organized. For our three-car business, the package room will merely have a sorting table and three small wagon tables. The latter hold the loads for each of the three cars and may be in the form of trucks, so that after loading they may be wheeled out of the room to the garage and the cars loaded direct. The package room should have strong doors and should be under the direct charge of the clerk or manager.

The Garage and Shop.

In the garage, which is in communication with the office either directly or indirectly, and with the package room by a single door wide enough for passing the tables through, there will be ample space for the four cars, the emergency or spare car being at the rear of the others. There should be a washing device, and lockers for the drivers, as well as the usual toilet room. The floor should be concrete with a slope toward the washstand or a drain opening at the center, for example. Directly communicating with the garage is the shop with which is incorporated a store-room. The equipment of the shop will de-

pend, of course, upon the type of car used.

For a motorcycle with sidecar or tricar attachment the following machine tools will be found invaluable (this is with the supposition that all repairs except brazing and welding are to be made by the station force): A small drill press with hand or power feed, an arbor press, an emery wheel and a vise or jig to fit on the table of the drill press. In hand tools, taper and straight taps and reamers, drills, chisels, a soldering outfit, monkey and Stillson wrenches, and one or two large "claw" wrenches, files and screwdrivers are to be supplied. The small tools should each have a place in a wall cabinet and the machine tools must be arranged to best allow of work on them and passage between them. A ground plan of a station is shown in the first figure.

In this figure A is the office and B the package room. A four-car (three in service and one spare) equipment is indicated, with room for expansion, of course. The shop is at D and the garage at C. E is the store room, an annex to D. At *a* is the sorting table and *b, b, b* are the loading or wagon tables; *c* is the spare car, *d* the washing device, *e* the bench, *f* the drill press and *g* the arbor press. The emery wheel is shown at *h* and the tool cabinet at *j*. A stand for a spare body is located at *k*. The plan is one arranged for a station on a 25 x 75-foot city lot, with windows at front and rear only. The front door of the station slides, while that to the office is on hinges. The door between the shop and

garage slides also and should be fireproof.

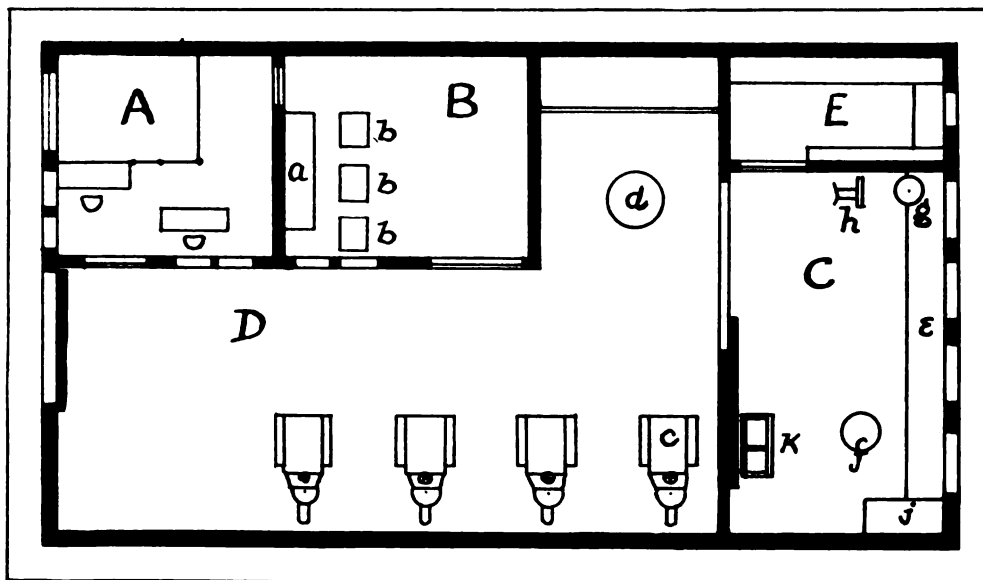
The Organization.

The diagram will give an idea of the organization of the *personnel* of such a station. At the head is the manager, who solicits business and oversees the entire staff. The clerk acts as bookkeeper and takes in all packages sent to the station, examines the route-cards, etc. He also supervises the drivers and employees in the absence of the manager. The station (garage and shop) is in charge of the shopman, who is a working-foreman—making repairs. He has for a helper a boy who washes down, does tire work, sweeps up, etc. The drivers (three in number) take care of their cars and assist in any repairs thereto, sort the packages and load them, etc. The store-room is in charge of the shop-man.

A schedule having been arranged for the day's runs, the driver starts out and calls at the various business houses on his route for packages to deliver. On arriving at each house he checks up the packages obtained, sorts them, signs the house's book and proceeds with the delivery. He returns to the station when all packages have been delivered. After the day's work is finished the driver removes any undelivered packages to the sorting table, crosses them off his list and turns the way-bill over to the clerk. He then looks over his car and assists in any necessary repairs.

As the business expands, it will be necessary to send out a car for collecting the packages in addition to the regular calls made. Such packages are brought in and unloaded on the sorting table. The clerk sorts them, placing them on the loading tables according to the routes taken by various cars. When each car returns, its loading table is wheeled to it. Packages are placed, of course, so that those farthest from the station will be in the back of the body, while those to be delivered nearest the station will be close to the door of the van.

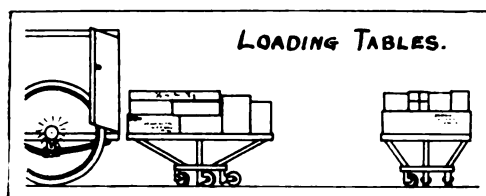
The spare car is driven by the shop-man to the scene of any breakdown and the load



transferred to it from the disabled car. The regular driver then takes the spare car and continues deliveries, while the shop-man gets the disabled vehicle back to the station. It is there repaired and tested out, the spare car in the meantime performing regular duty. When satisfactory, it is again placed in service and the spare car resumes its place in the garage as before. The reason for this is one of economy: a driver knows his regular car best and is inclined to keep it in better condition than one which may be driven by him today and by somebody else tomorrow. This has been found to be the means of saving hundreds of dollars per year for taxicab companies.

For comparison with the modest four-car organization one of ten cars (eight regular and two spare) is here given. The manager is now assisted by a subordinate, who solicits business; there is an extra helper for washing, etc., and a handy-man, who can drive, make repairs, etc. Eight drivers form the delivery force.

In such a system, one or two cars will be employed regularly in collecting and the remainder in delivering. One of the spare cars



will be fitted as a "breakdown" car, with appliances to make almost any repair on the street and to tow disabled cars, while the other is merely a spare car with box body. The shop-man is driver of the "breakdown" car and the handy-man of the second spare car, when the shop-man is out. Drivers sort packages, assisting the clerk, and there should be six loading tables.

The Supply of Spare Parts.

There should be enough spare parts in stock to take care of every trouble on 80 per cent. of the cars, and at least one complete spare motor and variable gear. These are kept in the storeroom and given out by the shop-man, who keeps account of them in a book under the head of each car. From the total of repairs, overhead expenses, salaries, etc., the costs are figured, and the gain at the end of any period is readily ascertained.

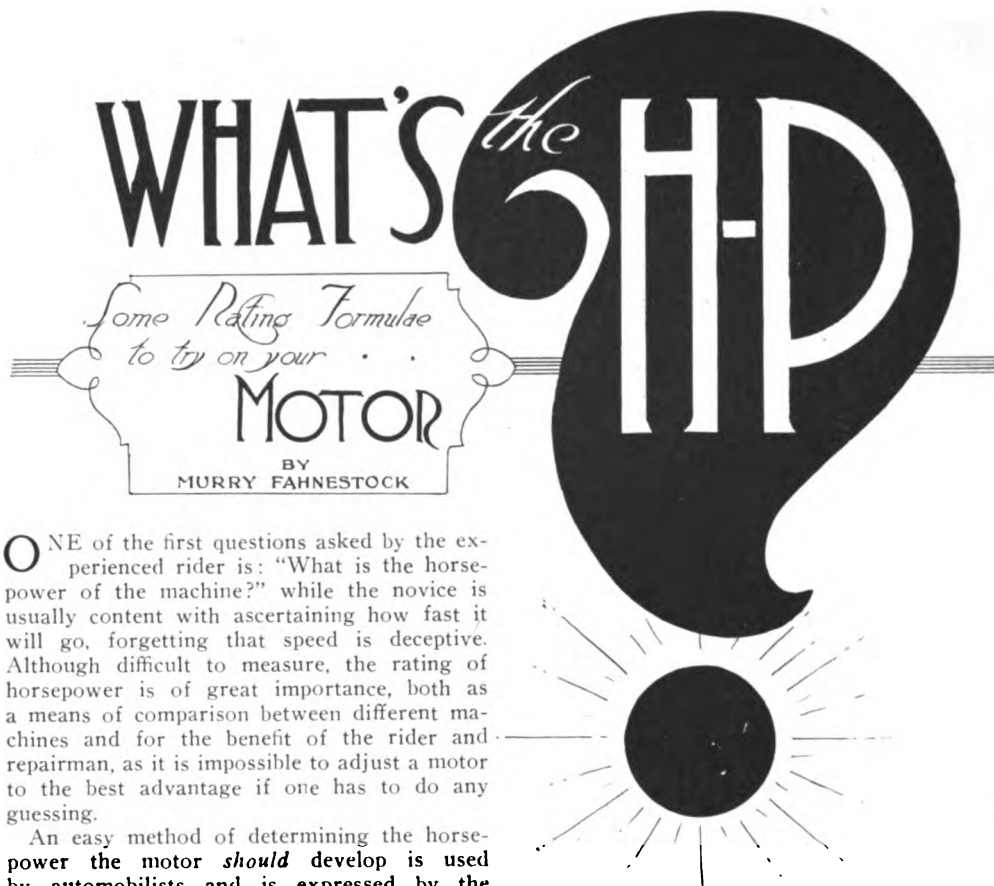
Where the service is such that the tires used per year will be sufficient to warrant a special contract with a tire company, such a contract by mileage per tire should be made. This is if the tubes are not "filled" as mentioned in Part I. In this event, "second" casings can be bought to advantage instead of new ones, provided the streets are not too rough and the surfaces of smooth sections are more or less continuous. It is in cities where the streets vary in paving that the configuration mentioned in the former section of this article affects the expense account adversely.

(To be concluded.)

GEORGE and Charles Berger, of Menominee, recently rode from Menominee to Milwaukee to attend the Vanderbilt cup races.

GASOLINE AVERAGES.

It is reported that the gasoline used on the recent Short Grass tour averaged 75 miles per gallon for the singles and 65 miles for the twins.



ONE of the first questions asked by the experienced rider is: "What is the horsepower of the machine?" while the novice is usually content with ascertaining how fast it will go, forgetting that speed is deceptive. Although difficult to measure, the rating of horsepower is of great importance, both as a means of comparison between different machines and for the benefit of the rider and repairman, as it is impossible to adjust a motor to the best advantage if one has to do any guessing.

An easy method of determining the horsepower the motor *should* develop is used by automobilists and is expressed by the

D^2N
formula — This assumes a piston speed of 2.5

1000 feet per minute, which is standard practice, as a short-stroke motor will make more revolutions per minute than a long-stroke motor of the same bore, thus keeping the piston speeds about equal.* In this formula D is the diameter of the cylinder, N the number of cylinders and 2.5 is an arbitrary constant, adopted from extended experience with many types and sizes of motor car engines.

The Cubic Displacement Method.

Another fairly good way to rate horsepower is by the cubic displacement method used in classifying motorcycle engines in racing. This method assumes that 7.5 cubic inches of piston displacement will be about equal to one horsepower. Thus 30.50 cubic inches will give about 4 horsepower and 61.00 cubic inches will give in the neighborhood of 8 horsepower. Thus the ratio between bore and stroke may be varied within wide limits while still keeping to the respective classes.

It is evident that both the above methods take it for granted that two motors of the same size will develop the same horsepower. Of course, some assumption of this nature is necessary when classifying machines for racing and endurance contests, but it may be far from the actual truth, as there are so many contributing factors. For instance, there is the compression; the size, lift and timing of the valves; the ignition, the adjustment of the

(* The writer apparently forgets the motors in the foreign racing machines in this connection. The 1910 de Dion 4-inch bore and 10-inch stroke single-cylinder motor has a normal piston speed of 3,000 feet per minute. The Lion-Peugeot voiturette motors, with a bore-stroke ratio of 1:2 have about 2,800 feet per minute piston speed. This shows the limited value of the S. A. E. and Royal Automobile Club formulae: $\frac{D^2N}{2.5}$.—Eds.)

carbureter, etc. All these may vary the power between quite elastic limits.

Figuring by Brake Test.

Furthermore, it does not necessarily follow that the motor giving the greatest maximum horsepower is best for road service, in view of the fact that racing motors, developing maximum power at high speeds, are exceedingly difficult to handle under ordinary riding conditions. After all is said, one of the best methods of measuring horsepower is by a brake test, but as brake horsepower is the product of two factors—speed and pull—some provision must be made for measuring them simultaneously. The speed or revolutions per minute should be measured by a tachometer, but this is a rather expensive instrument, and good results may be obtained from a revolution counter, costing \$1.50, and an ordinary watch.

One Reliable System.

When it comes to determining the actual horsepower delivered through the rear wheel to the road surface there is no system of measuring more satisfactory than one which involves a little traveling carriage and the aforementioned spring balance. The carriage is fitted with wheels which bring it against the under side of the tire when the machine is on the stand. The spring balance is fastened at a point forward, and the rear wheel of the machine is placed so that it rests on the carriage. Then when the motor is started the carriage will be driven backward proportionately with the power exerted through the wheel, and the actual drive in pounds is ascertained. Then by calculating the distance the periphery of the wheel travels, and multiplying it by the pull in pounds, and dividing by 33,000, the horsepower will be reliably determined.

DEMONSTRATING VANS.

MINNEAPOLIS, Minn.—The Minneapolis Motorcycle Company has just commenced an aggressive campaign to acquaint local merchants with the great value of the light delivery/tricar which it has been manufacturing for about two years. These cars have become quite popular throughout the country, but little or no effort has been made to promote local sales, owing to the fact that the manufacturers have been pushed to their utmost to produce machines for out-of-town dealers. Amongst the local firms now using these cars are the Minneapolis Dry Goods Co., Frank Greaves & Co., The New England Furniture Co. and The Motor Despatch Co. There is an additional car to be placed in the service of The Motor Despatch Co., also one finished in special colors to be delivered to Whitted's Flower Stores. Machines are now under way for Witt's Meat Market and Waldron, the dry cleaner.

The Minneapolis Motorcycle Co. is proving the efficiency of their cars by furnishing prospective purchasers with free delivery service for a limited period, and there is a big demand for demonstrations.

A THREE-DAYS' TOUR.

A THREE days' motorcycle trip is now being planned by the motorcycle club of Coffeyville, Kans. Invitations will be sent to all Kansas clubs. The club will divide and have two captains. The side finishing with the best score will be the guests of the losers at a banquet.

FOR FRISCO POLICE.

IN the photograph below appear ten Harley-Davidson machines which were recently purchased for the San Francisco police department from Joseph Holle, the local agent for H-D motorcycles. When the machines arrived Holle had them carted through the principal streets on a huge dray which carried suitable signs, and later they were placed on display for a time in his spacious salesroom. These machines are now being used by the police with excellent results.

**A FORMIDABLE TRIO.**

NOT long ago former F. A. M. President Hamilton, of the Federal Tire Company; W. J. Ash, of the Chicago Cycle & Supply Company, and W. J. Surre, of the Continental Rubber Works, met while in the West on business and the accompanying photograph shows them at Shasta Springs, Cal. That tire interests in general were well cared for on the coast with this genial trio on the trail goes without saying.

Ash, formerly connected with the Hine-Watt Company, recently completed a Western trip for the Chicago Cycle Company, and reports having done \$12,000 worth of business. He is now covering Eastern territory.

MOTORCYCLES AT FAIR.

LANCASTER, Ohio.—L. P. Birkenbach, who has the agency for the Thor in central Ohio, and who operates a branch house in Lancaster, had an exhibit of three machines at the Fairfield County fair last week. This is one of the largest county fairs in the State.

BREMER-WILSON COMPANY.

FRED G. BREMER, formerly manager of the Twitchell Gauge Co., and I. N. Wilson, president of the Fowler-Carnes Co., of Aurora, Ill., have formed the Bremer-Wilson Co., with offices at 1256 Michigan avenue, Chicago, to manufacture and market the Triplex gas saver and other automobile and motorcycle accessories.

Mr. Bremer is an automobile engineer of wide experience. His first connection was with the Bremer Machine and Tool Co., of Kalamazoo, Mich. He later spent some time with the Pope Mfg. Co., The American Mercedes Co., The Midland Motor Co., The United States Motor Co. and The Twitchell Gauge Co.

The Triplex, which is to be featured by the new company, is a device placed between the manifold and the carburetor to break up the mixture and thus afford greater fuel efficiency and minimum trouble from carbonization. It is claimed that by utilizing every drop of gasoline to its full capacity the Triplex effects a saving of 25 per cent. on fuel and also gives increased power. The Triplex prevents back-firing and assists in easy starting. The device may be attached by any rider in half an hour.

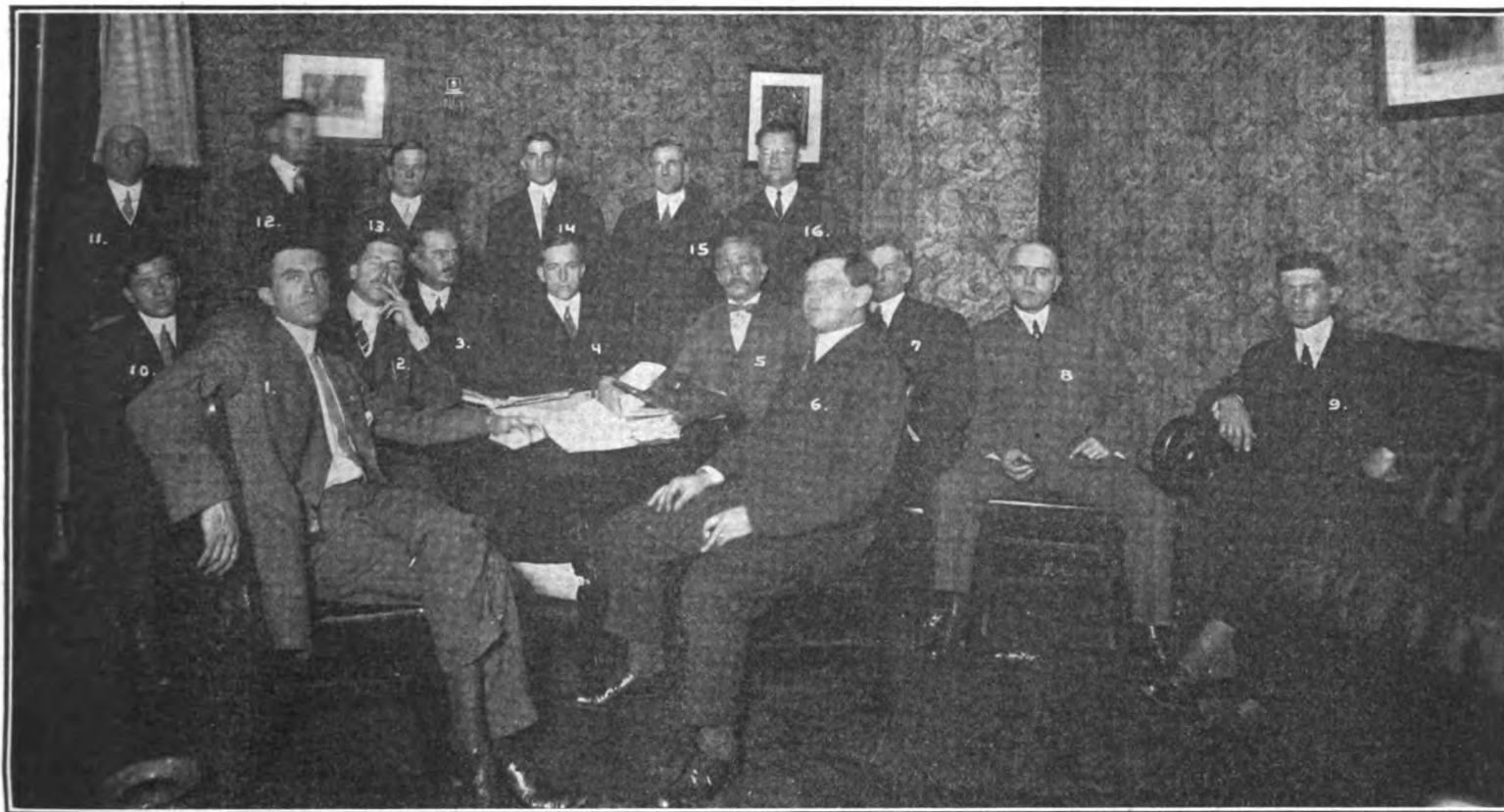
ANGSTEN-KOCH EXPANSION.

IN order to keep abreast of its rapidly growing business, the Angsten-Koch Company, of Chicago, manufacturers of the well-known Simplex tandem attachment, has added another floor to its factory and will produce about twelve new motorcycle accessories in addition to the tandem for the 1913 season. New machinery will be installed on such a liberal basis that besides turning out its own specialties the company will be prepared to manufacture accessories on outside orders. The company, which is to be represented at the Chicago Show, will make its 1913 announcement at an early date.

M. S. McNABNEY, manager of the Kansas Wholesale Grocery Company, of Coffeyville, Kans., has purchased a motorcycle to use for hurry-up trips around the city and for country trade calls. McNabney also owns an automobile, but prefers the motorcycle.



Headquarters of Joseph Holle, San Francisco, Agent for the Harley-Davidson. The Ten Machines in the Foreground Were Recently Purchased for the San Francisco Police Department, and Are Now in Service.



Members of M. M. A. at Recent Meeting in the New Southern Hotel, Chicago. President A. B. Coffman, 1; Kelly R. Jacoby, 2; F. W. Starr, 3; L. J. Carling, 4; Ignatz Schwinn, 5; F. J. Weschler, 6; William G. Schack, 7; R. W. Gould, 8; Benjamin Howard, 9; Guy M. Greene, 10; E. E. Hinman, 11; Robert Hinds, 12; Arthur Davidson, 13; E. J. Knight, 14; T. W. Henderson, 15; H. M. Kirk, 16.

MANUFACTURERS DISCUSS SHOW PLANS

At Lively M. M. A. Session in Chicago Reports Are Heard on Both New York and Windy City Exhibitions—Schwinn is Host at Luncheon

AT the busiest meeting held this season the Motorcycle Manufacturers' Association, holding forth at the New Southern Hotel in Chicago, on October 9, took up a number of important plans, mainly concerning the annual shows. The show committee announced that it has obtained 6,000 square feet of space to be set aside as the motorcycle section in the Grand Central Palace, where the New York Show will be held. This section is at the south end of the balcony, on the Forty-third street side. Applications have already been filed for most of the space and it is evident that manufacturers of both motorcycles and accessories are looking forward to an unusually imposing display.

Manager J. S. Vogel, who is in charge of the independent Chicago Motorcycle Show, was present at the meeting and his plans as outlined for the benefit of the manufacturers met with general approval. In Chicago, as in New York, the main difficulty will be to accommodate all the exhibitors.

With reference to the motorcycle exhibition to be held at the Panama Exposition in San Francisco in 1915, the committee in charge reported that about 10,000 square feet of space will be set aside for the display of motor single-trackers.

President A. B. Coffman, of the Manufacturers' Association called attention to the fact that he is no longer directly connected with the motorcycle trade and tendered his resignation. It was not accepted, however, the members deciding by a rising vote that

they wished the Toledo booster to continue as their president. As a result Mr. Coffman will remain in office, at least until the annual shows have been disposed of.

It was announced that the hearing on the application of the motorcycle manufacturers for lower freight rates on their machines, east of the Missouri river, will be held before United States Commissioner Prouty in New York City during the current month. Charles Drayton, of New York, has been retained to represent the manufacturers.

After the business session the manufacturers were entertained at lunch at the New Southern by Ignatz Schwinn, who proved an excellent host. Those in attendance were President Coffman, F. J. Weschler, Indian; Arthur Davidson, Harley-Davidson; E. J. Knight, Thor; F. W. Starr and E. E. Hinman, Pope; T. W. Henderson, Henderson; L. J. Carling, Schickel; William G. Schack, Emblem (Mr. Schack still held his perfect score for attending every meeting); Kelly R. Jacoby, Merkel; R. W. Gould, Black Hawk; Guy M. Greene, Eagle and M. M.; H. M. Kirk, Excelsior, and Ignatz Schwinn; Robert Hinds, Yale; Benj. Howard, Flanders; J. D. Hurley, of the Thor staff; W. W. Shoemaker, of Spartan belt fame; I. W. Wilson, representing the Fowler-Carnes Company; S. A. Falor, and W. J. Cameron, of the Goodyear tire forces, and Frank Pambela, designer of the new "Phantom" motor which is being manufactured by the North Chicago Machine Company.

Between periods of handshaking Mr. Shoemaker found time to announce that the Graton & Knight Mfg. Company has set aside a separate department for the manufacture of motorcycle belts in its big Worcester factory, and that the output will be doubled for 1913. Other company representatives and manufacturers hinted at big things, and on the whole the meeting was a record-breaking for enthusiasm and activity. The next session of the motorcycle manufacturers will be held at the Hotel Breslin in New York, on January 15, during the New York Show.

THE "STURDY" CARRIER.

AN unusually handy and dependable luggage carrier which embodies a Prest-O-Lite tank holder is now being sold by Stanley G. Kellogg, of 615 State street, Bridgeport, Conn. The carrier proper has a top surface 12 by 16 inches and a cushion is furnished with patent buckles so that it may be easily strapped to the carrier when it becomes necessary to carry a passenger. The fitment is so constructed that two steel bands, forming a circle to fit the gas tank, may be bolted on. In this way the tank is held securely at the back of the carrier making a pleasing appearance and allowing for economy of space.

SQUIER TO BE BENEDICT.

GEORGE H. SQUIER, well known to the motorcycle trade, and at present connected with the Consolidated Mfg. Co., of Toledo, will be married on Christmas day to Miss Florence Black, of Dayton, Ohio. For the last three months Mr. Squier has been making his home with Jess Campbell, of Dayton, and during this period Campbell succeeded in impressing him favorably with the advantages of domestic life.

MANUFACTURERS

RUBBER PROFITS LESS

International's Gross Income for the Year Reduced by a Million and a Half.

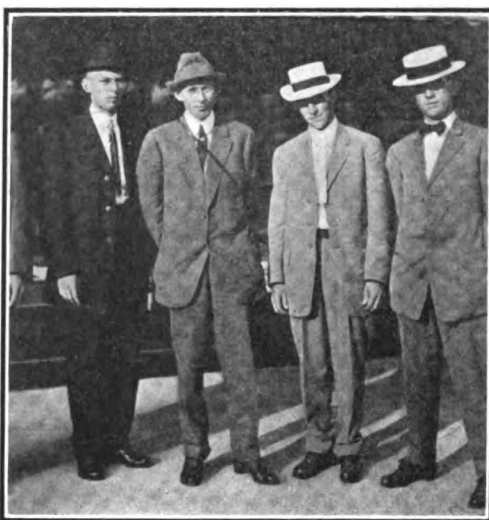
LARGELY decreased profits are shown in the annual report of the Intercontinental Rubber Company. The surplus available for dividends is placed at \$1,108,959, a decrease of \$1,531,559. The company paid out to stockholders in the way of dividends the sum of \$87,500, a decrease of \$1,211,990. This left a final surplus of \$1,021,459, equal to 3.52 per cent. on the \$29,031,000 common stock, as against 8-10 per cent. earned in the previous year. At the annual meeting the report of the directors was read. It said in part: "The year has been marked by a period of interruption of operations caused by revolutionary disturbances, which conditions, we regret to state, still exist, offering serious difficulties to the free transaction of business with Mexico."

The directors' report further said: "While the company's earnings show a considerable decrease over last year, they were still largely in excess of requirements for dividends on the preferred stock. The directors feel, however, that consideration of dividends on the common stock should be deferred until the situation in Mexico and the future supply of raw material are more assured. Meanwhile, the company remains in a strong financial condition, having cash and quick assets in excess of liabilities of nearly double the outstanding preferred stock."

A RUMOR to the effect that the Ford Motor Company, of Detroit, contemplates marketing a cyclecar, along the lines of those now coming into favor in England, has been officially denied.

SIGNED FOR 1913.

TREASURER W. T. MARSH, of the American Motor Company, of Brockton, Mass., is the second figure from the left in the accompanying photo, and his companions are dealers who have just signed up for their 1913 stocks of Eagle and M. M. machines. At the left is E. G. Zabel, of Bertelson-Zabel & Company, of La Moure, N. D., M. M. dis-



Secretary Marsh of M. M. Company (Second from Left) and Three Hustling Dealers.

tributors for North Dakota; at Mr. Marsh's left are Hugh Scanlan and A. B. Richards, of Scanlan & Richards, Bradley, S. D., distributors for South Dakota. The photograph was taken at Minneapolis, Minn., where Mr. Marsh held a business confab with the M. M. dealers.

SELLING 1913 EXCELSIORS

Toronto Agent Has Already Entered Upon Next Season's Business—The New Models.

TORONTO, Can.—Percy A. McBride has already sold several 1913 Excelsior motorcycles to local consumers, and the latest Chicago product is being eagerly inspected wherever it travels. The new models do not incorporate any radical changes from this year's design, but the machine is readily distinguishable by a new color effect. It is announced here, however, that the company will hereafter concentrate its efforts on the four and seven horsepower models, the six horsepower line to be discontinued forthwith.

NEW DELIVERY COMPANY.

MINNEAPOLIS, Minn.—For some months a company of wideawake young Minneapolis business men has been studying the delivery requirements of local merchants and has undertaken a comprehensive study of delivery service in other large cities throughout the country, with a view to supplying Minneapolis merchants with a form of package delivery that will give the utmost efficiency at the minimum expense. The new firm is known as The Motor Despatch Company and back of it are W. J. Rogers, D. McNott and F. Chapin. Some of the largest stores in the city have contracted for the service of the company. The company is made up entirely of Minneapolis material, from the stockholders to the machines themselves, Minneapolis tri-cars being used.

L. W. Blakeman is making a motorcycle trip from Benton Harbor, Mich., to California.



ANNUAL FISK CONFERENCE.

BRANCH managers and salesmen of the Fisk Rubber Company, of Chicopee Falls,

Mass., were in conference at the factory from September 9 to September 14, preparing for the opening of the 1913 season and mapping

out a broad-gauge sales campaign. The conference ended at a clambake. The photo shows the staff at the outing.



Fourth Annual Banquet Tendered Recently by the Haverford Cycle Company to Its Employees.

ANNUAL HAVERFORD DINNER.

RECENTLY the employees of the Haverford Cycle Company, of 827-29 Arch street, Philadelphia, gathered at the Aurora Hotel in Egg Harbor, N. J., for the fourth annual dinner tendered by the company, and the affair was productive of much enthusiasm. Each year the number of guests has increased and the company's plans for entertaining them have been elaborated upon proportionately. At the recent dinner several of the company's branch managers spoke on trade conditions and the policy which has been responsible for the rapid growth of Haverford business. Following the dinner dancing was provided for, some of the guests participated in a bowling tournament, and there was a high-class vaudeville program.

A COMPLETE LAMP LINE.

AT the plant of the Hawthorne Manufacturing Company, in Bridgeport, Conn., there is unusual activity these days and the company is preparing to go above its high-water mark of the present season with its sales for 1913. The makers of the Old Sol family of lamps will market a very complete line for next season. There will be five models of motorcycle headlights, numbered 1, 2, 8, 13 and 17, with separate generators; two models, 3 and 4, of the self-contained type; three gas tail lamp models, numbered 9, 15 and 16; a guide lamp, a miner's torch; a motorboat stand light; three types of carriage lamps, 7 and 11 self-contained and 12 to be used with a generator, and finally two attractive models of bicycle lamps.

Model 17, a motorcycle searchlight, is between models 1 and 8 in size. It has a 7¼-inch door front with 5-inch magnifying lens and measures 2 inches from burner to mirror lens. It is extremely sturdy and compact. A special hinge is a noteworthy feature. With one change of carbide in the No. 5 generator this lamp will burn for seven hours, throwing a light of 1,200 candlepower.

Practically the entire Hawthorne line has been improved in various points. On model 1 of the searchlights the side lugs are stronger than in the past as are the rear lugs on No. 2. On both models the door catch and knob have been improved and strengthened and the gas chamber is so constructed as to prevent any leakage. This improvement is also found on models 8 and 17. The No. 14 generator, as on all the other models and on the self-contained lamps, has an improved water-feed control. On the No. 5 generator the old thumb nut method of fastening together the water and gas chambers has been superseded by a winged nut. The No. 16 gas tail lamp is supplied with a combined red and white door glass, the red glass throwing the signal to the rear and on the road and the white light being thrown downward by means of a hood, to show the license number. The No. 7 carriage gas lamp has a reversible head, permitting the light to be used on either the right or left side of the vehicle. The No. 12 carriage lamp is similar to No. 7, except that it is not self-contained. In order to have ample manufacturing facilities for the large increase in demand for their products, the Hawthorne Manufacturing Company will build a new factory before next spring, to be three stories and of reinforced concrete construction. It will be about 300 feet long. No location has as yet been selected, but with the help of the Bridgeport Board of Trade the company expects to settle this important point soon.

SPARTAN BELTS POPULAR.

A RECENT letter from the English representative of the Graton & Knight Manufacturing Company, of Worcester, Mass., is to the effect that this firm's Spartan belts are rapidly coming into favor with British motorcyclists. In a reliability trial at Nottingham a short time ago the only machine to get through was equipped with a Spartan belt, and this has led many veteran riders to test the American product with satisfying results.

TURNER ON EASTERN TRIP.

H. F. TURNER, of the Minneapolis Motorcycle Company, is now on an eastern trip for the purpose of lining up 1913 agencies. His route carried him to Boston and through the New England states; thence to Washington, D. C. From this point he will proceed to Baltimore, and then jump to Rochester, N. Y., and make a stop at Buffalo. On his way back to Minneapolis he will also visit Chicago. He reports that dealers all along the line are primed for big business in 1913.

MORE POLICE MACHINES

ORDERS for machines to be used in police department service are still piling up at the Harley-Davidson plant. Two of the latest to be shipped went to the Savannah (Ga.) police, the sale having been made by the Balfour Hardware Company, H-D agents in Savannah. Another order is for a 7 h. police machine to be used in Sheboygan, Wis., the Wald Mfg. Co. having made the sale.

ECLIPSE EXTENSIONS.

WORK has been started on new buildings which will double the output of the Eclipse Machine Company, of Elmira, N. Y., for 1913, and the company is making general preparations for the extension of its business. The factory is now running night and day to keep abreast of orders. A number of large contracts have been signed during the last ten days, one of them calling for 20,000 of the Eclipse clutches.

EXTENSIONS PLANNED.

CANTON, Ohio.—Papers have been filed with the Secretary of State by the Knight Tire & Rubber Company, increasing its capital stock to \$1,500,000. Recently the capital stock was decreased from the original sum of \$500,000 to \$300,000, after which it was increased to \$1,500,000. The increase in stock is for the purpose of making extensions and improvements to the plant. The company was organized two years ago.

FULTON-McCUTCHAN ACTIVITY.

SINCE entering the motorcycle field about two months ago the Fulton-McCutchan Company, of Chicago, formerly the Fulton-Grubb Company, has established a record of unusual interest to the trade and riders in general. During the period mentioned this hustling firm has disposed of 32,000 motorcycle lamps and 17,000 Morse universal lamp brackets, in addition to 8,000 of the Speedo devices that are being used with such satisfactory results for improving carburetion. The company is sales agent for the Victor Lamp Company, of Cincinnati, and for the Jeffery-DeWitt Company, of Detroit, maker of the well-known line of spark plugs. The firm recently bought out the Electro Lamp Company, of Detroit, and these products will also be added to the Fulton-McCutchan line.

John W. Fulton, head of the organization, is a live booster for the motorcycle and motorizing in general and is widely known to the trade. He was recently joined by John J. McCutchan, also a well-known figure in trade circles, owing to the fact that he was for several years manager of the Chicago branch of the Splitdorf Company. E. L. Morse, formerly with the Bennett & Morse Company, of Columbus, Ohio, and E. C. Godfrey, of the Electro Lamp Company, of Detroit, are now on the Fulton-McCutchan traveling staff. A new offering from the company at an early date will be an improved spark plug which is to be manufactured by the Jeffery-DeWitt Company. A snappy new catalog will soon be ready for distribution.

INCREASE IN STOCK.

AKRON, Ohio.—The Buckeye Motor & Cycle Company, of Akron, Ohio, has filed papers with the Secretary of State increasing the capital stock from \$5,000 to \$50,000. The increased capital will be devoted to the enlargement of the company's business.

EYE AND NOSE SHIELD.

AN attractive and practical article of personal equipment for motorcyclists is a recently patented eye and nose shield, to be worn instead of goggles. It is marketed by the Sanitary Sales Company, of Bradford, Pa. The shield proper, while affording complete protection for the eyes, is very light and fastened to its lower edge is a cleverly devised strip of silk gauze which covers the



nostrils. It does not interfere with breathing but prevents dust from being drawn in to irritate the nostrils and throat. It is this desirable feature that justifies the term "sanitary" with reference to the shield. An application addressed to Box 1774, Bradford, will bring a leaflet telling all about the new product.



Heads of Fulton-McCutchan Company, of Chicago. John J. McCutchan at Top; John W. Fulton, Below.

SURRE AWARDS CUP.

W. J. SURRE, tire sales manager for the Continental Rubber Works, of Erie, Pa., returned recently from a trip to the Pacific coast, where he found unusual activity in both motorcycle and bicycle lines. It has been the custom of the genial Continentalite to bring the jobbers of Los Angeles together once a year and hold a bowling match. This year the Continental company donated a cup for the bowler with the highest score, and the competition was unusually keen. The contest was held on September 25. Max Flueckiger, of John T. Bill & Company, carried off the cup with an average of 166⅓. The averages of the other members of Flueckiger's team were as follows: East, of the William H. Hoegee Co., 157; Bill, of John T. Bill & Co., 145⅓; Schaefer, of the Hoegee company, 133⅓; Richmond and Surre, informal competitors, rolled up averages of 167⅓ and 136⅓, respectively. The members of the other team scored as follows: Smith, of the E. F. Merry staff, 148⅓; Merry, 136; Hartmann, of the Hoegee company, 129⅓; Sayre, of the Appeal Mfg. & Jobbing Co., 129; Passmore, of the same staff, 129, and Welborn, also of the Appeal forces, 85.

ANNUAL POPE STATEMENT.

PRESIDENT POPE'S report, embraced in the annual statement of the Pope Mfg. Company, of Hartford, Conn., shows that the company has enjoyed net earnings during the last year amounting to \$251,290 on a gross business of \$3,734,112. The surplus of the company stands over \$1,000,000 after writing off \$440,000 for reserves and for future replacements, scrapping of machinery and deterioration. No doubtful accounts are included in the statement. The company paid 6 per cent. on its preferred stock and made one payment of 1 per cent. on the common.

President Pope says that the plants have been kept in the most efficient condition and the cost of up-keep charged to operations. The inventory was made at actual cost and the item of accounts payable covers invoices that had not matured on July 31. All bills have been discounted.

TACOMA BREVITIES.

TACOMA, WASH.—Motorcycle dealers in this city and vicinity note an unusual demand for machines from the rural districts. Good crops and improved roads are helping to boost sales and agents are already beginning to worry over 1913 deliveries. They fear they will be unable to obtain machines fast enough to meet the demand.

H. H. and W. H. Worthley have opened a headquarters at 505 South K street, where they will handle the Simplex sidecar. They have gone into an energetic advertising campaign, and the sidecar is steadily gaining in popularity in this district.

SALESMEN ARE JUBILANT.

SAVANNAH, GA.—Traveling salesmen from northern manufacturers are just now crowding into Savannah with a view to lining up 1913 business, and the dealers are having a busy time of it. Among recent visitors were Arthur Mitchell, who is now pushing De Luxe motorcycle sales, and A. Griffin, known to the trade as "Smiley," who travels the year round for the New Departure coaster brake folks. Without exception the salesmen predict big things for the coming season.

AN AGENCY WANTED.

MANAGER M. L. Weber, of the Imperial Motor Company, of St. Louis, Mo., announces that he is desirous of getting into communication with manufacturers not already represented by agents in his city, with a view of obtaining the agency for a high-grade motorcycle. The company is located at 3334 South Grand avenue.

NEW COLUMBUS ORDINANCE.

COLUMBUS, Ohio.—City council has adopted an ordinance providing that all vehicles with the exception of baby carriages shall carry both front and rear lights. Included under this ordinance are motorcycles, and every machine will be compelled to carry a white light in front and a red light in the rear. The police department has been given instructions that the ordinance must be strictly enforced.

TO SPEND \$150,000.

THE Goodyear Tire & Rubber Company, of Akron, Ohio, is planning to erect an addition to its plant. The new building will be 250 feet by 60 feet, and five stories high, and will cost \$150,000. This will be the third large structure erected by the company during the present year.



Four Members of Philadelphia (Pa.) Police Department Who Recently Visited the Indian Factory in Springfield, Mass.

MOTOR COPS AT WIGWAM.

LOOKING the picture of health and in a cheerful frame of mind, four members of the motorcycle squad of the Philadelphia police department stopped at the Indian factory recently. They had toured from Philadelphia, choosing this pleasant way of spending their vacation. Lieutenant Fritz, who is the originator of the Philadelphia motorcycle police squad, headed the party, and was accompanied by three sergeants of the squad. They traveled by way of New York, and, with the exception of the lieutenant, all used single-cylinder machines. They had no trouble in getting over the roads. All the machines were sent to the repair department at the factory for inspection, but they needed no repairs.

NEW METROPOLITAN COMPANY.

A. L. COCCHI and Fred Voelker, both well known in metropolitan motorcycle circles, have formed the Metropolitan Motorcycle Repair Company, with headquarters at 320 Amsterdam avenue, New York City. Cocchi has had wide experience in repair lines and Voelker's general motorcycle knowledge has been gained through years of consistent riding and trade activity. The company will be prepared to make side-cars to order, to repair magnetos and do brazing, enameling and overhauling. It is the aim of the proprietors to cater not only for the simpler motorcycle repairs, but to stand ready to perform any service that does not require special factory attention.

NEW CLEVELAND FIRM.

CLEVELAND, Ohio.—The A. T. Hall Cycle & Manufacturing Company, of Cleveland, has been incorporated with a capital stock of \$5,000 to deal in motorcycle accessories, hardware and specialties. The incorporators are: Albert T. Hall, George H. Byers, W. H. Stadler, Clayton C. Townes and A. H. Knapp.

SILBY TO HANDLE MERKEL.

I. H. SILBY, of 4508 Detroit avenue, Cleveland, Ohio, has secured the agency for the Flying Merkel for 1913 and has contracted

for 300 machines. Mr. Silby was formerly connected with the W. Bingham Company, of Cleveland, and is a veteran rider. His establishment is well situated on the West Side and has been completely remodeled. It consists of an office and salesroom, where the new models will be exhibited, with space for accessories, and with a repair shop in the rear. This shop, which will be free to riders who patronize Silby, is equipped with a complete line of tools and is under the management of Wren Morris.

WHEN the new addition to the Tyer Rubber Company's factory in Andover, Mass., is completed in about two weeks the company will be prepared to manufacture tires for all kinds of motor vehicles.



A TEAM OF TIRE-MAKERS.

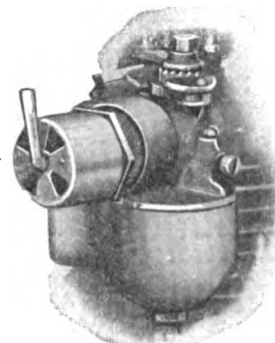
BY way of proving that men who make good tires can also turn out a satisfactory article in the way of baseball, the employees of the Pennsylvania Rubber Company, manufacturers of Vacuum Cup tires and other rubber products, have organized the team which is shown in the accompanying photograph. The boys have had an unusually suc-

AIDS IN STARTING.

DESIGNED to eliminate the most potent influence toward the invention of new cuss-words, the advent of the Clark Motorcycle starter, made by the W. F. Clark Mfg. Co., 3551 W. 23d st., Chicago, Ill., should be hailed with delight by the legions of riders who waste time, tongue and temper in trying to start a "cold" motor.

The Clark Motorcycle starter is an attachment to be slipped over the end of the auxiliary air port of the carbureter, which can be done by any one in a few seconds. To start the engine, the starter handle is turned to the right, which shuts off the auxiliary air. As soon as the engine is warmed up, the starter handle is turned to the original position, which reopens the auxiliary air valve. If a richer mixture is wanted without stopping to adjust the carbureter, the starter handle is turned to the right until the desired mixture is obtained.

The manufacturers claim for this handy little device that it will materially reduce gasoline consumption. This is a reasonable assertion, inasmuch as a waste of gasoline inevitably results from starting a "bashful" motor. The weight of the attachment is only four ounces.



FRED S. MERRILL, a pioneer in the bicycle and motorcycle business in Spokane, Wash., died on October 2.

HAROLD A. SHAW and John E. Hogge, of Urbana, Ill., are planning to visit Europe, Asia, Africa and Egypt on their motorcycles next summer.

cessful season, finishing second in the Westmoreland County (Pa.) league and breaking even in the city championship series. Besides baseball the Pennsylvania company encourages its employees to take up other sports. A fine tennis court, with shower bath arrangements, is in use and another is being prepared at Paruco Park, the pleasure ground of the company's staff.

CRIMPED OLDFIELD'S TIME.

SOME time ago Barney Oldfield turned off 10 miles in his big racing car in 10:44 1-5 on the track at Butte, Mont., and merely by way of proving that he has no respect for automobile champions, Curnow, a Butte motorcyclist, went out and reeled off 10 miles in 10:39 1-5. This placed him five seconds inside Oldfield's time and made him the idol of local race followers. The photograph shows the start of the 10-mile event in which Curnow and his Indian crimped the Oldfield mark for the track; Curnow is the fourth rider from the left.

DALLAS RACES DRAW WELL.

IN the motorcycle races held in connection with the Dallas (Texas) Fair, Frank Harter, of Dallas, covered three miles in 3 minutes, 32 seconds, in a race against time, while Charles Crawford won first place in all four competitive events. B. F. Connor was in charge of the races. The weather was ideal and the grounds were crowded, these being the first motorcycle races many of the spectators had seen.

FIRST ENDURANCE RUN.

THE first motorcycle endurance run held in Washington, D. C., took place October 13-14, under the auspices of the National Capitol Motorcycle Club. The riders left Washington at 6 a. m., Sunday, with Philadelphia as the objective point of the first day's run. The route pursued was via Lancaster and the distance was 178 miles. On Monday they returned to Washington, via Havre de Grace and Baltimore, covering 150 miles.

NOVEL RACING MACHINE.

J. A. LENZ, a Virginia racer, appears in the accompanying photograph on the special Flying Merkel with which he made an



excellent showing in a recent meet at Jamestown. The machine is an interesting hybrid, frame and tank having been built by Michael Suttle, Merkel agent in Newport News, Va. A 7 h. motor is fitted.

A SHORT GRASS STAR.

PAUL WARNER carried off the honors in the recent state meet of the Kansas Short Grass Touring Club, which was a success despite threatening weather. Warner won first place in all the professional events, and took the gold medal for the state championship. There were nine events in all and Warner took first place in six of them.



Start of 10-mile race at Butte, Mont., in which Curnow (second from right) lowered Barney Oldfield's time for the track.

FINE RUN BY DOLPH

Rochester Endurance Trial Proved Worthy of Its Name, Only One Rider Keeping His Score Intact.

ROCHESTER, N. Y.—After repeated attempts the Rochester Motorcycle Club succeeded in pulling off its annual endurance run on September 29. The route included all kinds of roads, including sand and clay. It ran through Scottsville, LeRoy and Warsaw to Mt. Morris and back through Geneseo and Avon. The cold, raw weather kept the entries down to fifteen when the starting gun barked, and twelve miles out a stinging, drizzling rain started in for the day.

From Scottsville to Warsaw the run became an elimination trial; those checking in at Warsaw being Dolph, P. E. M.; Wagner, P. E. M.; Hendee, P. E. M.; Strobel, Harley 7; Heckman, Indian 7; Yells, New Era; Turner, P. E. M. The greasy clay proved too much for the others. Just outside of Warsaw is a two-mile hill and in the rain its ascent made climbing a greased pole tame by comparison. Dolph, Wagner and Hendee reached the top, where Wagner's clutch balked. Hendee had clutch trouble later, which he repaired on the road, finishing 5 hours late.

Dolph got through the mud to Mt. Morris, reaching the control with five seconds to spare. From here the roads were a little better and he finished at the home control on time, half frozen, but with a perfect score.

A NOVELTY RACE.

BALTIMORE, Md.—A novelty race, in which two motorcycles participated, was run at the Laurel track on Friday, October 4. There were two foot runners, two motorcycles, two horses and two automobiles and the contestants were given proper handicaps. The two foot runners came in first but only a flash before the flying motorcycle of T. R. Dedge, of Washington, who would have easily won the race had not the runners got away before the starting flag dropped. F. M. Day, mounted on another motorcycle, failed to come in on the money, while the horses and automobiles did not have a chance.

FOUR motorcycle races held in connection with the Binghamton (N. Y.) Industrial Exposition on September 27 were the feature events of the day.

BIRKENBACH WINS HOUR RACE.

COLUMBUS, O., Oct. 13.—Leo Birkenbach, on a Thor, captured the big race in today's program on the one-mile dirt track at the Driving Park. The race was an hour affair, Birkenbach besting Don Klark in the last stage of the event and making 65.4 miles for the 60 minutes of riding. All the races were close and a large crowd was in attendance, despite cool weather. First honors were divided between Klark, Birkenbach, Yates, Hare and Snyder. Summaries:

Three miles, 30.50 open; won by Bascom, Thor; second, Dressel, Indian. Time, 3:24 4-5.

Five-mile professional, 61 open; won by Klark, Indian; second, Evans, Indian; third, Birkenbach, Indian. Time, 4:31.

Four-mile amateur, 61 class, stripped stock; won by Bascom, Thor; second, Yates, Indian; third, Woolley, Indian. Time, 3:56 1-5.

Five-mile professional, 30.50 open; won by Evans, Indian; second, Hare, Indian; third, Birkenbach, Thor. Time, 5:11.

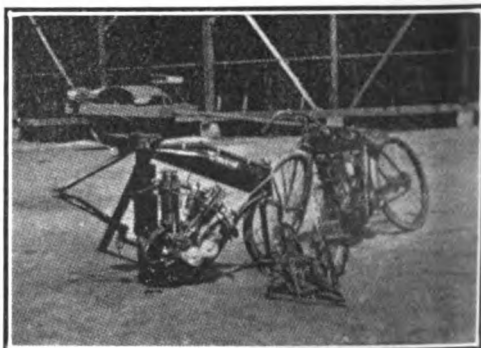
Pursuit race, ten miles, 61 open; won by Evans, Indian; second, Klark, Indian; third, Birkenbach, Indian. Time, 8:59.

Six-mile professional, 61 open; won by Evans, Indian; second, Klark, Indian; third, Birkenbach, Thor. Time, 5:27.

Five-mile amateur, 61 stripped stock; won by Woolley, Indian; second, Yates, Indian; third, Miller, Indian. Time, 5 minutes.

Hour race, professional, 61 open; won by Birkenbach, Thor (64.5 miles); second, Klark, Indian; third, Snyder, Merkel.

A RUN to Harper's Ferry, via Frederick, over 150 miles of scenic country in western Maryland, was recently held by the Maryland Motorcycle Club.



Wrecked machines of Eddie Hasha and Johnnie Albright at Newark.

RELAY TRIAL POSTPONED

Impassable Roads in the West Force Officials to Call Off Test Trip from Ocean to Ocean.

OWING to the fact that many of the roads along the route of the proposed relay trip from New York to San Francisco were found to be practically impassable at latest reports, the F. A. M. cross-country test, which was to have started from the eastern metropolis on October 12, was called off at the eleventh hour. Chairman J. P. Thornley, of the F. A. M. competition committee, who was to have carried the official message on the first relay, received a telegram from Charles Fuller Gates, chairman of the relay committee, instructing him to this effect and explaining that it would be inadvisable to send the riders on their coast-to-coast journey before May, 1913.

It is pointed out that some stretches of the trans-continental route afford the hardest kind of going, even under the most favorable weather conditions, and that to attempt a trip over these roads with the fall season at hand would be little short of foolhardy. Practically all the arrangements had been made for the trial and the gold-lettered leather case in which the message was to have been carried to the Pacific Coast was ready in Doctor Thornley's office in the Hotel Ansonia, New York City, when the Gates telegram arrived. The relay trial was planned with a view of ascertaining with what speed a message could be carried from coast to coast so that army officials might be enabled to form a more definite opinion of the motorcycle's value as an emergency vehicle for military service.

STATE COMMISSIONERS NEEDED.

PRESIDENT PATTERSON announces that F. A. M. State commissioners are either appointed or under consideration for all the States except Delaware, Florida, Illinois, Indiana, Kentucky, Mississippi, Maine, Minnesota, Massachusetts, North Carolina, Nevada, North Dakota, Oklahoma, Wyoming and Indian Territory, and he is desirous of getting into communication with Federation workers who are willing to fill out the list. To this end he suggests that factory representatives supply him with the names of active dealers in the States which still lack commissioners.

A FOUR-TIME WINNER.

FORTUNE varies considerably regarding the winners of classic motorcycle events, but in the English Six Days Trials, an annual event, one crew has obtained the team prize for four years in succession. This is the Phelon and Moore team, of which W. Pratt, of London, is captain. He is here shown after finishing the 1912 trials, where he again captained the winning team.



SIX SCORES INTACT IN CHICAGO GRIND

Twenty-Mile an Hour Schedule Combined with Sand and Clay Pulled Down the Averages of Contenders for Chicago M. C. Trophy



Jack and Dick Purdy on Chicago M. C. Endurance Run. The Latter Scored Perfectly.

OSCAR PERSONS and R. F. Purdy, Harley-Davidson sevens; J. B. Mason, Indian 7; L. C. Davis, Excelsior 7; Dale Smart, Thor 4, and Thomas Monroe, Sears 7, finished with perfect scores in the Chicago Motorcycle Club's semi-annual endurance run for a handsome trophy. The 193-mile course was from Michigan City, Ind., to South Bend, Ind., Joliet, Ill., and Chicago. The riders left Michigan City at 8 a. m. on October 5 and found controls at South Bend, La Porte, Valparaiso, Dyer and Joliet. The return run was via Dyer and thence to the clubhouse in Chi-

cago. The schedule called for 20 to 23 miles per hour, and at each of the controls the contestants were required to check in on the minute, making it very difficult to keep a perfect score.

The course afforded a wide variety of road surfaces, and many sand and clay stretches were encountered. Between Dyer and Joliet the route could not rightly be called a road; it was little more than a trail. This section was made up of sticky clay, part of which had dried out, leaving deep ruts.

Side-Lights on the Run

Jack Purdy, after covering more than half the course with a perfect score, was finally awarded highest honors for punctures and blow-outs, having four in less than six miles. The Purdy brothers, Jack and Dick, are shown in the accompanying photograph.

Jack Mason, who recently did some clever amateur riding at the Riverview Motordrome, struck a rock while riding at high speed in a deep wagon rut and soared skyward, but managed to alight feet first and was uninjured.

A short distance from Michigan City, Boedecker struck several ruts and took a hard spill. With the aid of several passing tourists he was able to patch up his machine and ride back to Chicago.

Barlass was last seen bending over a water trough in New Carlisle, "looking for bubbles."

Oscar Persons and Dick Purdy, riding Harley twins, made a fast run from LaPorte to Valparaiso, a distance of 22 miles. They covered this stretch in 32 minutes.

FROM SECRETARY GIBSON.

IT was with reluctance that Secretary Gibson submitted a report to the effect that no clubs were affiliated or repair shops registered during the week ending October 12. These conditions have not existed previously in many moons, and the National Secretary wants it understood that one week of inactivity along these lines is plenty. He is now anxiously awaiting reports from clubs and repairmen with a view to making up lost time.

The National Secretary announces that a new supply of F. A. M. stationery has been received and that shipments will be made promptly to commissioners who make application. Doctor Gibson has also forwarded the new certificates for State Commissioners to President Patterson, who will send them out to his appointees.

The F. A. M. has just paid its eighth \$25 reward for the recovery of a motorcycle stolen from a member. Chief of Police Charles J. McCabe, of Poughkeepsie, N. Y., located a machine which had been stolen from Horace Van Dusen, of Poughkeepsie, and the Federation check was forwarded as soon as the necessary papers were on file.

GOODYEARS ON LONG TRIP.

MR. AND MRS. HARRY HUMPHRIES, now on their way around the world on a Minneapolis machine fitted with a tandem attachment, use Goodyear tires and report that they are standing up wonderfully under the strain of carrying the double load over good, bad and indifferent roads.

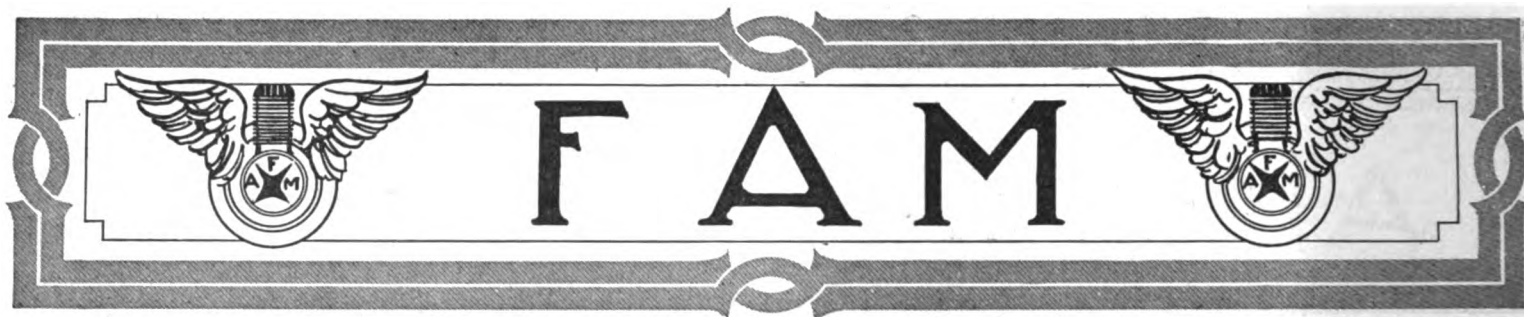
\$1,000,000 TO \$2,000,000

Federal Rubber Manufacturing Company Increases Its Capital Stock.

THE Federal Rubber Manufacturing Company, of Milwaukee, on Saturday last filed in the office of the Secretary of the State of Wisconsin amendments to its articles of association, increasing its capital stock from \$1,000,000 to \$2,000,000, the increase consisting of 7% preferred stock, redeemable at 120. The increased capitalization has been made necessary by the phenomenal growth of the Federal Company's business in the past year, during which time the actual sales have exceeded the estimated sales for the year by \$400,000, and to provide for future expansion.

In May of last year, the Federal Rubber Manufacturing Company purchased the plant of the Federal Rubber Company at Cudahy, since which time the present company has made extensive additions to the plant, practically trebling the floor space of the original plant.

Additional buildings and other improvements are now under way, including a new power plant aggregating 3,500 boiler horsepower, and a further addition to the office building. This work is made necessary by immediate requirements of the business and, when completed, the total expenditures for improvements will represent approximately \$50,000, giving the company about 250,000 square feet of floor space, providing employment for between 1,000 and 2,000 men.



F. A. M. GAINS IN SEPTEMBER.

F A. M. membership gains for September were as follows: Maine, unaffiliated, 1; renewals, 1. New Hampshire, unaffiliated, 2. Massachusetts, affiliated, 17; unaffiliated, 14; renewals, 14. Rhode Island, affiliated, 2; unaffiliated, 2; renewals, 11. Connecticut, renewals, 2. New York, affiliated, 12; unaffiliated, 21; renewals, 23. New Jersey, affiliated, 5; unaffiliated, 7; renewals, 6. Pennsylvania, affiliated, 14; unaffiliated, 19; renewals, 15. Maryland, affiliated 5; renewals, 3. Virginia, affiliated, 5; renewal 1. West Virginia, renewal, 1. District of Columbia, renewal, 1. North Carolina, affiliated, 3. Tennessee, affiliated, 6; unaffiliated, 1; renewals, 2. Georgia, affiliated, 2; renewal, 1. Florida, renewal, 1. Alabama, renewals, 2. Texas, affiliated, 12; renewals, 4. Kentucky, renewals, 2. Ohio, affiliated, 38; unaffiliated, 38; renewals, 30. Indiana, affiliated, 53; unaffiliated, 2; renewals, 9. Illinois, affiliated, 41; unaffiliated, 6; renewals, 14. Missouri, affiliated, 10; unaffiliated, 2; renewal, 1. Wisconsin, affiliated, 14; unaffiliated, 6; renewals, 3. Michigan, affiliated, 16; unaffiliated, 8; renewals, 3. Minnesota, affiliated, 1. South Dakota, affiliated, 2. Nebraska, unaffiliated, 1; renewal, 1. Kansas, affiliated, 20; unaffiliated, 3; renewals, 3. Iowa, affiliated, 11; unaffiliated, 2; renewals, 2. California, affiliated, 23; unaffiliated, 4; renewals, 16. Utah, unaffiliated, 2; renewals, 7. Colorado, affiliated, 23; unaffiliated, 1; renewals, 17. New Mexico, affiliated, 2; unaffiliated, 2. Arizona, affiliated, 1. Idaho, affiliated, 4; unaffiliated, 1. Oregon, affiliated, 1; unaffiliated, 1; renewal, 1. Washington, affiliated, 38; unaffiliated, 3; renewals, 30. Total, affiliated, 381; unaffiliated, 149; renewals, 227.

MEMBERS of the Aberdeen (S. D.) Motorcycle Club recently made a Sunday afternoon jaunt to Tacoma Park.



Members of Sioux City M. C. Watching an Aeroplane on a Recent Outing.

REGISTERED REPAIR SHOPS.

F A. M. repair shops were registered for the week ending October 5, as follows: Tracy E. Davis, 307 East State street, Ithaca, N. Y.; Wedge Garage Co. (P. D. Gath), 170 South Sixth street, Zanesville, Ohio.

NEW STAFF CHOSEN.

AT a recent meeting of the Fort Wayne (Ind.) Motorcycle Club the following officers were elected: A. C. Aichele, president; L. Mommer, vice-president; C. F. Shorey, secretary, and William Dreibelbiss and W. Brass, treasurers.

NEW F. A. M. CLUBS.

NEW clubs affiliating with the F. A. M. in September, as reported by Secretary Gibson, were as follows: Yakima M. C., Yakima, Wash.; Trinidad M. C., Trinidad, Colo.; Jefferson M. C., Jefferson, Wis.; Anderson M. C., Anderson, Ind.; Chicago Heights M. C., Chicago Heights, Ill.

PRESIDENT PATTERSON has reappointed the following F. A. M. State Commissioners: E. B. Ewell, Richmond, Va.; J. A. Campbell, Dayton, Ohio.; G. Eugene Lain, State College, New Mexico; Dr. B. Y. Leslie, Pasadena, Cal. New appointments were made as follows: J. D. Miller, Atlanta, Ga.; J. Benton Lindsay, Portland, Ore.; G. E. Woodwell, Wichita, Kan.; W. D. Gresham, Birmingham, Ala., and M. H. Hawkins, Jerome, Ariz.

C. M. A. CHAMPIONSHIPS.

IN spite of adverse weather conditions and a soft track the C. M. A. Western Championship races were pulled off at the Kirkfield park track, Winnipeg, Manitoba, Can., on October 5. Joe Baribeau and Jimmy Cruickshanks were the star riders of the day.

BATTLE CREEK CLUB.

BATTLE CREEK, Mich., now has a motorcycle club, and the photograph shows a few of the riders lined up for a recent informal run. A. J. Rush is president of the new club; Charles Skinner, vice-president; E. W. Mallernee, secretary, and R. Cummings, treasurer. It is the intention to affiliate the squad with the F. A. M. on a 100 per cent. basis.



Headquarters of Wolverine Auto-Cycle Company, in Battle Creek, Mich.

AMONG THE CLUBS



Imperial Riders of Brooklyn, N. Y., in the Wilds of Staten Island on a Recent Sunday Outing.

RUN TO EGG HARBOR.

THERE was a highly creditable turn-out of members of the Harley-Davidson M. C., of Philadelphia, Pa., for a run to Egg Harbor, N. J., on September 29, no less than 111 riders making the round trip. Ideal weather and good roads made a combination which permitted the squad to enjoy every minute of the outing. At the American Hotel in Egg Harbor City a chicken dinner was served, with Alexander Klein, of Philadelphia, and W. Heckenhorn, of Camden, N. J., as the hosts. Klein and Heckenhorn are Harley-Davidson agents in their respective cities. Incidentally, the outing marked the first anniversary of the organization of the club.

NEW CLUB FORMED.

THE Central Jersey Motorcycle Club, of Trenton, N. J., has disorganized owing to friction between the riders of different makes of machines. Ninety per cent. of the members were Indian riders and they have formed a new club and will have their headquarters over the store of John Sykes, Jr. Sykes is the Indian agent and has given the space without rent so that the dues will be spent for monthly smokers or theater parties. Bowling teams have already been formed.

A NORFOLK CELEBRATION.

BY way of celebrating the success of its Labor Day race meet, on which it cleared \$400, the Twin City Motorcycle Club, of Norfolk, Va., recently gave a banquet at the Lynnhaven Hotel.

NOTES OF BALTIMORE RIDERS.

BALTIMORE, Md.—A "Sweetheart Trip" was taken Sunday, September 29, by the members of the Maryland M. C. Every rider used a tandem and seated behind was his wife or sweetheart. The idea to give the ladies an outing in this way was taken up with enthusiasm as soon as it was announced, and when the start was made for Laurel the women folks were there in all their glory. The run down to the Midway City is a short one and was made in good time.

On Sunday, October 6, the members of the club had a strenuous run to Harper's Ferry, W. Va. It was the second journey over the mountains for the boys and they thoroughly enjoyed the beautiful scenery and splendid roads. The local contingent was swelled by riders from Frederick and Woodbine, who joined the bunch this side of the mountains.

G. H. Heinz and August Zimmerman left last Friday for a trip north. Their journey will be through the New England states with Springfield, Mass., as their ultimate destination. Zimmerman only recently made a similar trip, and now the two boys have left with the determination to break Zimmerman's record.

Motorcycle races will again be the big feature at the Frederick County Fair, at Frederick, Md. Valuable prizes will be offered and entrants are expected from this city and Washington.

FIVE members of the Wichita (Kans.) M. C. recently made an all-day run to Eureka. They left Wichita at 9 a. m., reached Eureka at 2 p. m. and arrived home at 7.30.

A SUNDAY run to Beaver Dam, via Sun Prairie and Columbus, was recently held by the Four Lakes Motorcycle Club, of Madison, Wis.

BLACK HILLS CLUB IS ACTIVE.

AT the last meeting of the Black Hills Motorcycle Club, of Deadwood and Lead, South Dakota, it was voted to have a dance and masquerade at an early date, and the largest hall in Lead has been procured for the affair. The proceeds will be used in fitting up new club rooms. It was also decided to hold a hill climb before the last of October. A. J. Walley, club president and State F. A. M. commissioner, and Phil. Schoenberger, the local Yale agent, are waxing enthusiastic over a plan to have a South Dakota tour similar to the Short Grass Tour of Kansas.

TERRE HAUTE OFFICERS.

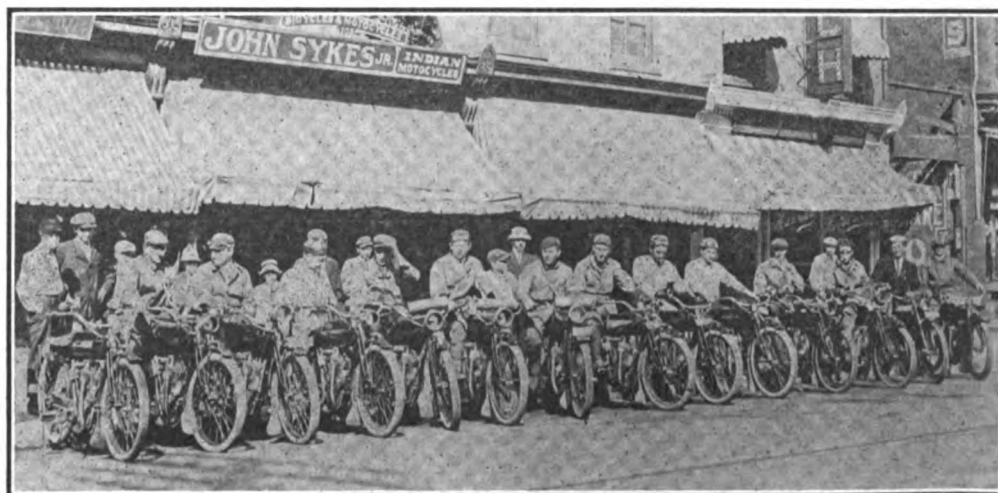
AT the annual election of the Terre Haute (Ind.) Motorcycle Club the following officers were chosen: Roy Forbeck, president; Guy Jackson, vice-president; Fred. Stahlacker, secretary; Edward Wagner, treasurer, and A. C. Ferguson, road captain. Members were also chosen for the entertainment, racing and membership committees.

ATTENDED ROAD CONGRESS.

A NUMBER of motorcyclists of Plainfield, N. J., together with members of various other clubs, whom they met at Point Pleasant, participated in a sociability run to Atlantic City recently to attend the opening of the American Road Congress at which Governor Wilson was one of the speakers.

ENTERTAINED AT CLEVELAND.

WHILE in Cleveland, the Ohio State F. A. M. contestants were entertained by the Cleveland M. C. A theater party was given at the Empire and a section reserved for the riders and members of the club.



Indian M. C. of Trenton, N. J., Ready for a Recent Run to Asbury Park.

GEAR RATIO AND SPEED TABLE

Calculated for 28-inch Wheel

Compiled by D. R. HOBART.

THE subjoined table has the gear ratios from 3 to 6½ in the left-hand vertical column, and motor speeds horizontally in the upper column across. The upper row of figures, printed in full face, gives the number of revolutions of the rear wheel per minute and the lower row the speed in miles per hour.

To use the table select the gear ratio desired and move horizontally until directly under the approximate motor speed figure. In the square at the junction of the gear ratio and motor speed lines will be read the speed of the machine in miles per hour and the number of revolutions of the rear wheel. Example: 4:1 gear, 2400 revolutions per minute of motor. The rear wheel will revolve approximately 600 times a minute, and the speed will be 49.7 miles per hour. For a 26-inch wheel, multiply the figures by 13/14.

GEAR RATIOS	MOTOR SPEEDS (RPM)																				MOTOR SPEEDS (RPM)
	1000	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	
3	333 27.6	400 33.1	433 35.9	466 38.6	500 41.4	533 44.1	566 46.8	600 49.7	633 52.5	666 55.2	700 58.0	733 60.7	766 63.5	800 66.2	833 69.0	866 71.8	900 74.6	933 77.2	966 80.0	1000 82.8	4100
3 1/8	320 26.4	384 31.7	416 34.3	448 36.9	480 39.6	512 42.2	544 44.8	576 47.4	608 50.0	640 52.6	672 55.2	704 57.8	736 60.4	768 63.0	800 65.6	832 68.2	864 70.8	896 73.4	928 76.0	960 78.6	4000
3 1/4	307 25.6	370 30.8	400 33.1	431 35.6	461 38.4	492 41.0	523 43.6	553 46.0	584 48.6	615 51.2	646 53.8	677 56.4	707 59.0	739 61.6	770 64.2	800 66.8	830 69.4	861 72.0	891 74.6	922 77.2	4100
3 3/8	296 24.6	355 29.8	385 32.0	414 34.5	444 37.0	474 39.5	503 42.0	533 44.4	563 46.9	592 49.3	622 51.8	652 54.3	681 56.8	711 59.3	740 61.8	770 64.3	800 66.8	828 69.3	859 71.8	888 74.3	1207
3 1/2	285 23.7	343 28.6	371 30.9	400 33.3	428 35.6	457 38.0	486 40.5	514 42.8	543 45.2	571 47.6	600 50.0	628 52.3	657 54.7	686 57.1	714 59.5	743 61.9	771 64.3	800 66.7	829 69.1	856 71.5	1171
3 5/8	275 23.0	331 27.5	358 29.1	386 31.4	413 33.8	441 36.0	468 38.0	496 40.2	524 42.4	551 44.6	579 46.8	606 49.0	634 51.2	662 53.4	689 55.7	717 57.9	744 60.1	772 62.3	800 64.5	827 66.7	1130
3 3/4	266 22.1	320 26.6	346 28.8	373 31.0	400 33.3	426 35.5	453 37.7	480 40.0	506 42.1	533 44.4	560 46.6	586 48.8	613 51.0	640 53.3	666 55.5	693 57.7	720 60.0	746 62.1	773 64.4	800 66.6	1093
3 7/8	258 21.5	309 25.7	334 27.8	361 30.0	387 32.2	413 34.4	438 36.5	464 38.6	490 40.8	516 42.9	542 45.1	568 47.3	593 49.4	619 51.6	645 53.7	671 55.9	697 58.0	722 60.1	748 62.3	774 64.5	1058
4	250 20.7	300 24.8	325 27.0	350 29.2	375 31.4	400 33.6	425 35.8	450 38.0	475 40.2	500 42.4	525 44.6	550 46.8	575 49.0	600 51.2	625 53.4	650 55.6	675 57.8	700 60.0	725 62.2	750 64.4	1025
4 1/8	242 20.1	290 24.1	315 26.2	339 28.2	363 30.2	388 32.3	412 34.3	436 36.3	460 38.4	485 40.4	509 42.4	533 44.4	557 46.4	581 48.5	605 50.5	629 52.5	653 54.5	678 56.5	703 58.5	727 60.5	1018
4 1/4	235 19.5	282 23.5	307 25.4	331 27.4	355 29.4	379 31.3	403 33.3	427 35.2	451 37.2	475 39.1	499 41.1	523 43.0	547 45.0	571 46.9	595 48.9	619 50.8	643 52.8	667 54.7	691 56.7	715 58.6	964
4 3/8	228 19.0	274 22.8	297 24.6	320 26.6	343 28.4	365 30.4	388 32.3	411 34.2	434 36.1	457 38.0	480 40.0	502 41.7	525 43.7	548 45.6	571 47.5	594 49.4	617 51.3	640 53.3	662 55.1	685 57.0	937
4 1/2	222 18.5	266 22.2	288 24.0	311 25.9	333 27.7	355 29.6	377 31.4	400 33.3	422 35.2	444 37.0	466 38.8	488 40.7	511 42.6	533 44.4	555 46.3	577 48.1	600 50.0	622 51.8	644 53.7	666 55.5	888
4 5/8	216 18.0	260 22.4	281 24.3	302 26.1	324 28.0	346 29.8	367 31.5	386 33.2	410 35.0	432 36.8	454 38.6	475 40.4	497 42.2	516 44.0	540 45.8	562 47.6	583 49.4	605 51.2	627 53.0	648 54.8	885
4 3/4	210 17.5	252 21.0	273 22.7	294 24.3	316 26.3	336 28.0	358 29.8	378 31.5	400 33.3	421 35.0	442 36.8	463 38.5	484 40.3	505 42.0	526 43.8	547 45.5	568 47.3	589 49.0	610 50.8	631 52.5	863
4 7/8	205 17.0	246 20.5	266 22.1	287 23.9	307 25.5	328 27.3	348 29.0	369 30.7	389 32.4	410 34.1	430 35.8	451 37.5	472 39.3	492 41.0	512 42.6	533 44.4	553 46.1	574 47.8	594 49.5	615 51.2	841
5	200 16.5	240 20.0	260 21.6	280 23.1	300 24.8	320 26.4	340 28.1	360 29.8	380 31.4	400 33.1	420 34.7	440 36.4	460 38.0	480 39.6	500 41.2	520 42.9	540 44.6	560 46.2	580 47.8	600 49.4	820
5 1/8	195 16.2	234 19.5	253 21.0	272 22.4	291 24.0	310 25.6	329 27.2	348 28.8	367 30.4	386 32.0	405 33.6	424 35.2	443 36.8	462 38.4	481 40.0	500 41.6	519 43.2	538 44.8	557 46.4	576 48.0	800
5 1/4	190 15.8	228 19.0	247 20.5	266 22.1	285 23.7	304 25.3	323 27.0	342 28.5	361 30.1	380 31.7	399 33.3	418 34.9	437 36.5	456 38.0	475 39.6	494 41.2	513 42.8	532 44.4	551 46.0	570 47.6	780
5 3/8	186 15.5	223 18.5	241 20.0	259 21.6	277 23.2	295 24.7	313 26.3	331 27.9	349 29.4	367 31.0	385 32.5	403 34.0	421 35.6	439 37.1	457 38.7	475 40.2	493 41.8	511 43.4	529 44.9	547 46.5	763
5 1/2	181 15.0	218 18.1	236 19.6	254 21.1	272 22.6	290 24.1	308 25.6	326 27.1	344 28.7	362 30.2	381 31.7	399 33.3	418 34.8	436 36.3	454 37.8	472 39.3	490 40.8	509 42.4	527 43.9	545 45.4	745
5 5/8	177 14.7	213 17.7	231 19.2	248 20.6	266 22.1	284 23.6	302 25.1	320 26.6	337 28.0	355 29.5	373 31.0	391 32.5	409 34.0	426 35.5	444 37.0	462 38.5	480 40.0	497 41.5	515 43.0	533 44.5	728
5 3/4	172 14.3	208 17.3	226 18.8	243 20.2	261 21.7	278 23.2	295 24.7	313 26.2	330 27.7	347 29.2	365 30.7	382 32.2	400 33.7	417 35.2	435 36.7	452 38.2	469 39.7	487 41.2	504 42.7	521 44.2	713
5 7/8	170 14.1	204 17.0	221 18.4	238 20.0	255 21.2	272 22.6	289 24.0	306 25.5	323 26.9	340 28.3	357 29.7	374 31.1	391 32.5	408 34.0	425 35.4	442 36.8	459 38.2	476 39.6	493 41.0	510 42.4	700
6	166 13.8	200 16.5	216 18.0	232 19.3	248 20.7	264 22.0	280 23.4	296 24.8	312 26.2	328 27.6	344 29.0	360 30.4	376 31.8	392 33.2	408 34.6	424 36.0	440 37.4	456 38.8	472 40.2	488 41.6	683
6 1/8	163 13.5	196 16.3	212 17.6	228 19.0	244 20.4	260 21.8	276 23.2	292 24.6	308 26.0	324 27.4	340 28.8	356 30.2	372 31.6	388 33.0	404 34.4	420 35.8	436 37.2	452 38.6	468 40.0	484 41.4	669
6 1/4	160 13.3	192 16.0	208 17.3	224 18.6	240 20.0	256 21.3	272 22.6	288 24.0	304 25.3	320 26.6	336 28.0	352 29.3	368 30.7	384 32.0	400 33.3	416 34.6	432 36.0	448 37.4	464 38.8	480 40.2	656
6 3/8	156 13.0	188 15.6	204 16.9	219 18.2	235 19.5	250 20.8	266 22.1	282 23.4	298 24.7	313 25.9	329 27.2	345 28.5	360 29.8	376 31.1	392 32.4	408 33.7	424 35.0	440 36.3	456 37.6	472 39.0	643
6 1/2	154 12.8	185 15.4	200 16.6	215 17.9	230 19.1	245 20.3	260 21.5	275 22.8	290 24.0	305 25.2	320 26.4	335 27.7	350 29.0	365 30.3	380 31.6	395 32.9	410 34.2	425 35.5	440 36.8	455 38.1	631

GEAR RATIOS



Joe Wandstret, Excelsior Speedster.

FORTY-FIVE FINISHED

In Annual Triangle Run of the Providence M. C.—A List of the Participants.

WITH fifty motorcyclists starting, including five sidecar passengers, and forty-five finishing, the annual Triangle Run of the Providence (R. I.) Motorcycle Club, held on October 6, was one of the most successful affairs ever undertaken by the squad. A large crowd gathered at Exchange Place to witness the start, which was made at 7 a. m., four riders leaving every minute, until the full party was on the road. Long before the riders were due to finish, so large a crowd had assembled that the participants had difficulty in forcing their way to the checkers. They reported in squads, as in starting, and most of them arrived before 3 o'clock, the schedule time being 4 o'clock.

Charles Gustafsen, a well known rider and a tester at the Hendee plant, was among the contestants with a 1913 Indian. B. A. Swenson rode a 4 h. Indian, with sidecar and passenger, and kept up with the fastest of the bunch. At one time he set the pace, pushing ahead of the other machines whose riders at once opened up and cut out a lively clip. This was the cause of a few spills but no one was injured. Frank Labonta took a spill in leaving Worcester and he had to stop to make repairs; this left him eight minutes late in Providence. Fred. Peterson, of Providence, sustained an injury to one of his knees as the result of a collision with Russell Coes, of Worcester.

The most spectacular fall was that of Secretary J. G. Edwards who took a spill on a curve. Seeing the machine going from under him he slid off and the motorcycle turned completely over and landed upside down in the road, on the saddle and handlebars, with the engine going full tilt. No damage was done.

Most of the roads were in good shape and all the riders had an enjoyable trip. This run closed the club's 1912 touring season and the next big event will be the annual Herring Run which will mark the opening of the 1913 season. Members of the club will continue riding until the cold weather sets in and the club has arranged for a pool and whist tournament for the winter. Monthly socials will also be held.

The following is a complete list of participants in the Triangle Run: Providence.—Chas. Westcott, 4, Indian; E. L. Buffington, 4

Indian; F. Labonta, 7 Indian; C. A. Anderson, 7 Indian; F. A. Lutzer, 7 Indian; W. C. O'Brien, 7 Indian; J. C. Garanil, 7 Indian; M. Ross, 7 Indian; J. G. Edwards, 7 Indian; F. Peterson, 7 Indian; C. Litterio, 7 Indian; E. G. Luther, 7 Indian; C. W. Rayhill, 7 Indian; H. W. Munroe, 4 Indian; G. W. Lane, 7 Excelsior; Miss C. Ross, sidecar; A. V. Howe, 7 Indian; T. Howe, sidecar; B. A. Swenson, 4 Indian; Miss E. Smith, sidecar; F. O. Johnson, 7 Indian; J. Loftus, 4 Harley-Davidson; Arthur Dio, 7 Indian; C. H. Frazier, Pawtucket, R. I., 7 Indian; T. J. Conroy, East Greenwich, R. I., 7 Indian; W. L. Emin, Stillwater, R. I., 7 Indian; C. W. Alibrich, East Providence, R. I., 4 Indian; L. W. Ludden, Brockton, Mass., 7 Indian; E. Grove, Brockton, Mass., 7 Indian; W. H. Errishaw, Jewett City, Conn., 6 Merkel; H. F. Hildreth, Somerville, Mass., 6 Merkel; T. Asherlund, Somerville, Mass., 6 Merkel; Russell Coes, Worcester, Mass., 7 Indian; Chas. Gustafsen, Jr., Springfield, Mass., 7 Indian; P. A. Merhoff, Boston, Mass., 7 Indian; A. J. Gaudreau, Fall River, Mass., 7 Indian; J. Parent, Pawtucket, R. I., 4 Indian; Arthur Izzi, East Greenwich, R. I., 4 Harley-Davidson; C. A. Sherman, Middleboro, Mass., 4 Thor; L. Bryant, Middleboro, Mass., 4 Thor; Howard



J. S. Vogel,
Manager and
General
Publicity
Man for
the Chicago
Motorcycle
Show.

Clark, Worcester, Mass., 7 Indian; L. Robinson, Worcester, Mass., 7 Indian; Glen Crandall, Boston, Mass., 5 Thor; Lincoln Holland, Jr., Los Angeles, Cal., 5 Monarch; A. R. Braman, Newport, R. I., 7 Indian; C. Lurson, East Saugus, Mass., 7 Indian; James Baxter, Boston, Mass., 7 Indian with sidecar; D. A. Rowley, Dedham, Mass., 6 Merkel, with sidecar and passenger.

BIG PITTSBURGH TURN-OUT.

NOT less than 15,000 people witnessed the thrilling motorcycle races at Schenley Oval, in Pittsburgh, recently under the auspices of the Pittsburgh Press. A. G. Schmidt did some excellent riding and won four out of the five events.

ON TRIP TO TEXAS.

MR. AND MRS. S. J. SADLER, of Oakland, Cal., are making a motorcycle tandem trip from their home to Houston, Tex. They report little or no difficulty in covering the mountain roads.

PLANNING BROOKLYN BOWL.

CHARLES T. EARL, of Brooklyn, N. Y., is making an effort to procure Washington Park, formerly the home grounds of the Brooklyn National League baseball team, for the purpose of erecting a motordrome.

BREVITIES

NEW ORLEANS, La., has a force of eighteen motorcycle special delivery boys on its postal staff, and the post office at Madison, Wis., has also adopted the motorcycle in its special delivery service.

THE Balfour Hardware Co., of Savannah, Ga., agents for the Henderson, report the sale of two machines to ex-president Dawson Wyley, of the local club, and Young Comer, also of Savannah.

THE City Council in Berkeley, Cal., recently decided to allow a definite sum for the up-keep of motorcycles owned by patrolmen and sometimes used by them on official business.

OUT of thirty-five starters in the recent endurance run of the Rackford (Ill.) M. C. only eleven reached Chicago and but ten returned. Ralph Olson (Indian), A. S. Johnson (Harley) and Carl Swenson (Harley) tied for first place with 998 points.

HALE FLETCHER, motorcycle officer of Coffeyville, Kans., has returned from a ten days' vacation which he spent on his motorcycle. The officer toured southern Kansas.

SUCH satisfactory service was rendered by the two motorcycle cops in Tampa, Fla., during the last year, that the department has purchased two additional machines.

DR. JAMES MCCOY, of New Wilmington, Ill., although 83 years of age, owns a motorcycle and enjoys his trips about the country as keenly as any youngster.

A CLUB run to Newburgh was recently held by members of the Middletown (N. Y.) M. C. under the direction of Captain Foote and Lieutenant Decker.

SEAL ROBINSON, representing the Grand Forks (N. D.) Evening Times, is en route on a motorcycle trip to the Pacific coast.

JOHN HOGAN, a motorcyclist of Saginaw, Mich., plans to visit every capitol in the United States on his machine next summer.



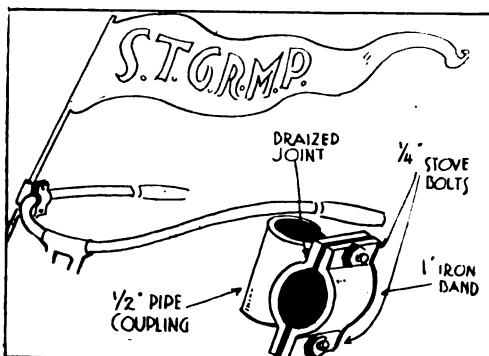
George Rentel, Class B. Chicago Motordrome.

POINTERS FROM A MINNESOTA DEALER

Veteran Booster Describes Several Handy Devices for Riders and Also Suggests Two Wrinkles for Repairmen

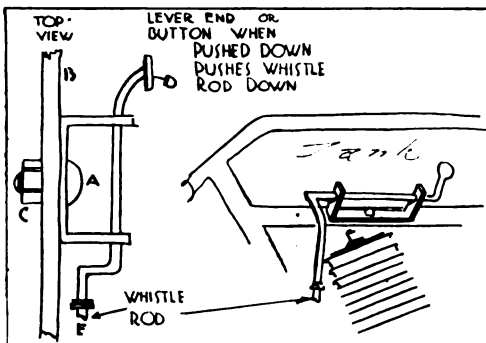
F. C. DOLDER, who operates F. A. M. registered repair shop No. 289, in St. Charles, Minn., is a practical mechanic as well as a rider of experience, and the equipment of his headquarters embraces many ingenious devices. Being of an inventive turn of mind he is constantly reaching out for something new and frequently he hits upon an idea worthy of general application to the motor two-wheeler. On this page are shown several sketches embodying suggestions offered by the St. Charles repairman.

The first illustrates a pennant fastener, which has been tried out by the riders in and about

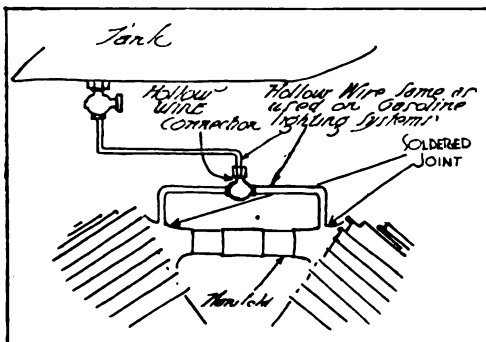


St. Charles and found to meet all the requirements. The pennant is fastened to a round hardwood stick and screwed into the pipe coupling, and the contrivance may be placed in any position on the handlebar. The method of arranging the coupling with reference to the band iron and bolts which encircle the handlebar is clearly shown in the diagram.

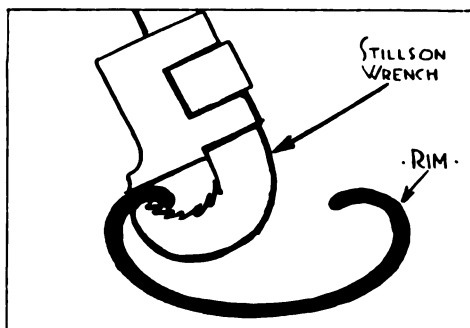
Another suggestion from Dolder has to do



with a whistle control. The St. Charles dealer argues that such a control should be so placed that the rider does not have to hunt for it and fumble unnecessarily in operating it. To meet these requirements he has devised a control which is operated by the rider's knee.



Double Priming System.



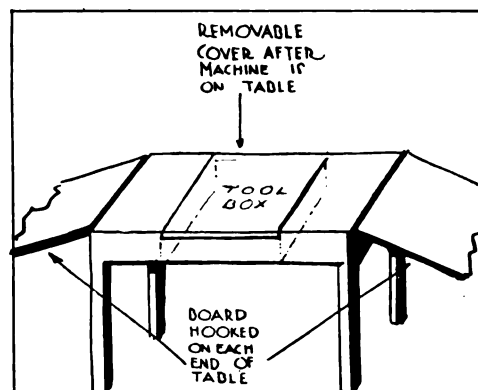
To Straighten Bent Rim.

The diagram shows how this contrivance may be applied to a twin machine.

With cold weather coming on Dolder has also turned his attention to a priming device and has perfected a system which permits of priming both cylinders without a moment's delay. The diagram shows how he leads a thin pipe from the gasoline tank to the cylinders, a cut-off being fitted near the tank as shown for the purpose of running the gasoline when necessary.

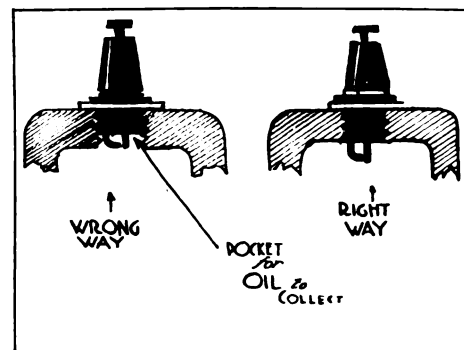
In another sketch is shown Dolder's method of straightening a bent rim. He points out that a monkey wrench is clumsy, and that a Stillson properly used will do the work neatly and with no loss of time.

With a view of assisting his brother repairmen, Dolder has prepared the accompanying plan of a work-bench for a motorcycle shop. The planks on either side are used as runways and the center top section of the bench lifts out when the machine is straddling it, so that the mechanic has ready access to the tools which are kept in a sort of cockpit. He also suggests that dealers obtain a common wire-stretcher such as farmers use for stretching wire fences, and fasten it in the ceiling of the shop to be used as a block and tackle. It may be used for lifting either wheel of a motorcycle from the floor, and is capable of



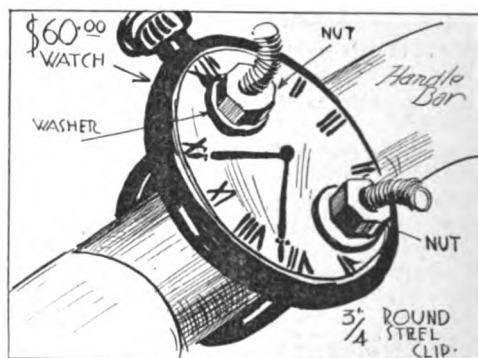
sustaining the entire weight of the machine if necessary. Dolder asserts that this wrinkle is the handiest in the world for trueing up the wheels or adjusting cones. The wire-stretcher costs only fifty cents.

While Dolder's spark plug idea is not new, it is worth a mention. He points out that the plug should not be placed as in the first sketch, as a pocket is thus formed in the cylinder head to collect oil and foul the plug points, but as shown in the second drawing. In this diagram the plug proper is flush with the



inner surface of the cylinder and the points project into the explosion chamber.

In his last suggestion Dolder becomes jocular and outlines a method of fastening a watch so that it will not jar loose from the handlebar. He recommends that the rider obtain a good watch, worth anywhere from \$50 to \$70, and have a blacksmith punch a 1/4-inch hole through the whole outfit, works and case, just over the second hand, and another similar hole below the number 12. A



1/4-inch steel bar is then bent and passed through the holes, the completed job appearing as shown in the sketch. Dolder and his assistants assert that no watch fastened in this way has ever been lost through jarring loose.

PRESS MACHINE TAKEN.

A 1912 Harley-Davidson, belonging to the Lafayette (Ind.) *Morning Journal*, which had been left in front of the office, was stolen recently. The words "Morning Journal" were painted on the left side of the gasoline tank and above "Harley-Davidson" on the right. The machine is equipped with free wheel control, Goodyear studded tires, Troxel saddle and Thor brake. The engine number is 2435B, and license No. T-14-53.

MAINE TO CALIFORNIA.

NELSON L. MOULTON is riding a motorcycle from his home in Ketterly Depot, Maine, to San Francisco. He mounts a twin Excelsior and is devoting considerable time to the trip as he is visiting friends along the route.

WANT GONGS SOUNDED.

COFFEYVILLE (Kans.) motorcycle riders are up in arms on account of the failure of street car motormen to sound gongs. Several accidents have been narrowly averted. A petition to have the city commissioners pass an ordinance requiring carmen to use the foot gong will be prepared.

SECRETARY J. M. McDONALD, of the Mississippi State Fair Association, has announced an interesting program of motorcycle races to be held October 24, 25 and 26.

"Yale Team Wins Again"

The Yale Team has annexed another Trophy

This time it is the Ohio State F. A. M. Lake-to-River, 600-Mile Endurance Run in which the "Y" has come through a winner.

Starting from Toledo, October 11, the contestants made for Cincinnati, by way of Upper Sandusky, Mansfield, Cleveland, Akron, Canton, New Philadelphia, Zanesville, Newark, Columbus, Springfield, Dayton and Middletown.

On the first day's run to Cleveland the most wretched sort of roads were encountered—the result of a three-days' rain.

Again the Yale proved itself superior to the worst of road conditions.

Again the "Y" team was the only factory team to finish even the first day's journey.

Again the three members of the "Y" team flashed into the last checking station at Cincinnati, on October 13, ahead of all others—the only team to finish intact.

Again Jacobs had a perfect score; Squier had a perfect score, and Campbell had

a perfect score—minus four points a policeman took off by holding him up.

It's another glorious victory for conscientious Yale standards; for painstaking "Y" practice.

At Fort Ancient Hill the majority of riders had to pedal up the 23% grade.

Again the Yale proved self-sufficient—the "Y" team had no need for pedals—the "Y" motor went right on as on the straightaway.

Coming after the Yale victory in the Middletown-to-Elyria run and the capture of the Manufacturers' Trophy in the New Jersey 24-hour endurance run, doesn't this latest "Y" achievement prove to you the advantage of Yale construction?

Just what does it mean when the other teams fall by the wayside—and the Yale team crosses the line a winner?

"Yale Again Wins Reliability Run"—you read it everywhere.

Investigate.

Singles and Twins.

Battery and Magneto.

Belt or Chain Driven.

Send for catalog and territory information.

The Consolidated Manufacturing Company

Member M. M. A.

1730 Fernwood Avenue

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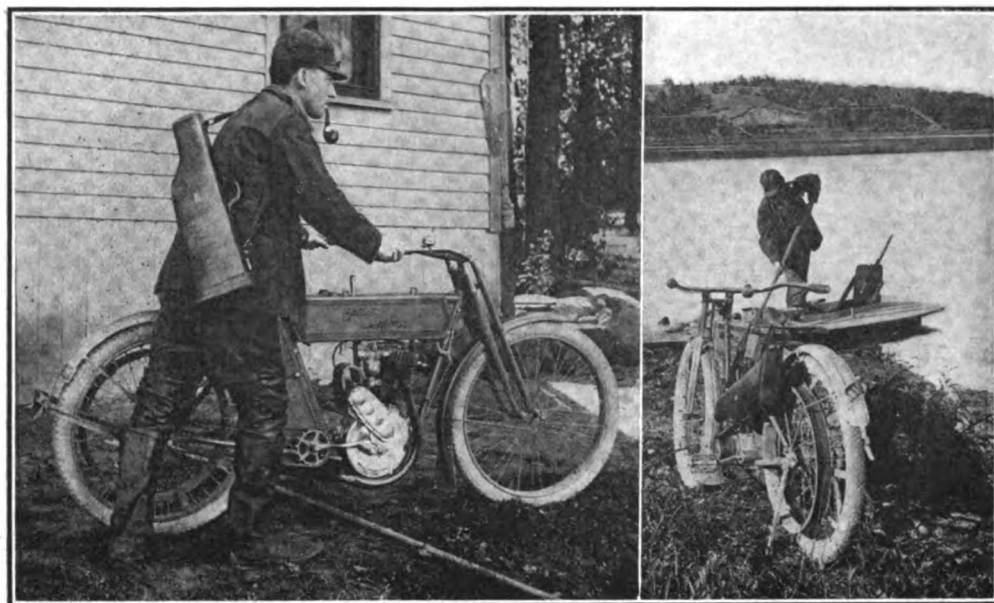
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TOLEDO, OHIO

F. C. CORNISH, Eastern Representative, 219 Clinton Avenue, Newark, N. J.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



HOW THE MOTORCYCLE HELPS.

MANY lovers of duck hunting have found that in order to reach a satisfactory shooting-ground it has been necessary to make a tiresome railroad journey, but of late the motorcycle has solved the transportation problem to such good effect that no hunter need worry over this phase of his outing. The accompanying photographs show how one sportsman utilized his Harley-Davidson machine to get within reach of the elusive ducks.

BUCKINGHAM-HAZLETT.

ANNOUNCEMENT is made of the marriage of Joseph Buckingham, of New York City, and Miss Myrtle Bertha Hazlett. Mr. Buckingham is manager of the motorcycle department of the Weaver-Ebling Company, of New York, Harley-Davidson agents in the metropolis. Mr. and Mrs. Buckingham will reside at 525 West 182nd street, New York City.

AFTER NEW LINES.

HARRY B. COHEN, of the National Capitol Tire and Supply House, of Washington, D. C., will leave shortly on a trip in quest of new products for his firm. The company will handle a full line of automobile and motorcycle tires and accessories and act as direct factory representatives, selling to the wholesale trade only.

MACO CARBURETER.

EXPERIENCED motorcyclists who seek maximum fuel efficiency with minimum expenditure and trouble are finding much to interest them in the simple and sturdy Maco carbureter, manufactured by the Motor Appliance Company, of 71 Warren street, New York City. The main object of the designers of the "Maco" has been to produce a carbureter that the average owner could not fail to understand and that could be adjusted so as to get maximum efficiency with least amount of adjustment. There are but two adjustments, the gasoline for low speed, and the auxiliary air for high speed, and these once regulated become permanent. The float chamber is radial, and the spray nozzle is directly in the center, which insures a constant fuel level

in any position of the engine. The venturi tube in the constant air supply is so placed as to insure a good charge of gasoline, and breaking it up into the finest possible spray. The needle valve adjustment is at the top.



It is suitable for any type of motor, whether two or four cycle, marine, automobile or stationary.

A. BERNSTEIN, Reading-Standard agent at Trenton, N. J., has also secured the Excelsior for 1913.

WITH CLEVELAND DEALERS.

THE K-V. Motorcycle Company, of Lake avenue, Cleveland, which was formerly under the management of George Knapp and Carl Volk, will hereafter be managed by Volk. Volk has bought out Knapp's interest in the firm. He will handle the Henderson exclusively for next season.

THE Welding & Cycle Repair Company has opened up in Cleveland at the old stand of the Yale Cycle & Supply Company, under the management of F. C. Booth and Joseph Pittaway. Welding and brazing is their specialty, while the motorcycle and bicycle repairing business will be taken care of.

WASHINGTONIANS UP IN ARMS.

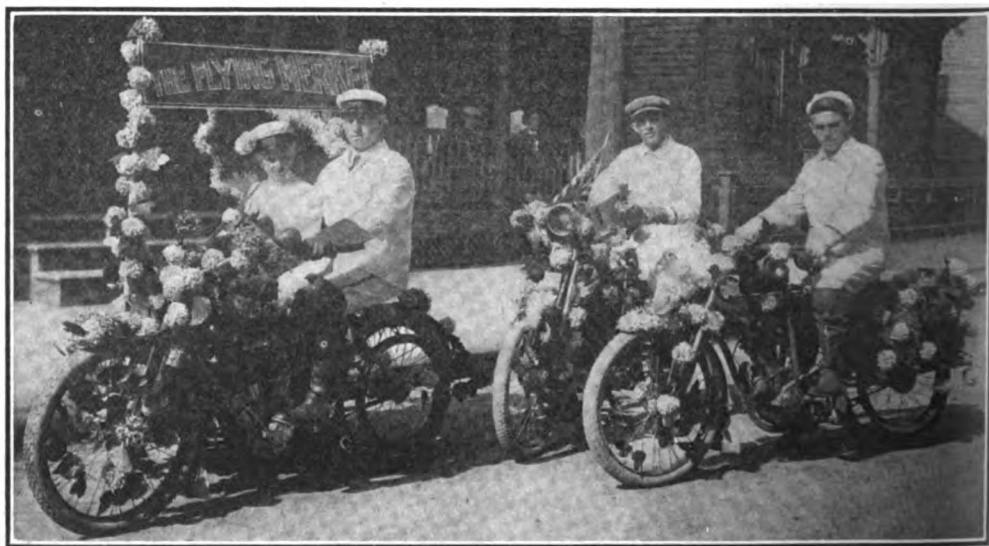
MOTORCYCLISTS of Washington, D. C., are preparing to wage a legal fight against an unreasonable ordinance which prohibits the carrying of a woman passenger on any motorcycle, no matter how it is equipped, and forbids the carrying of a male passenger except on a regular tandem attachment. The latter clause is not seriously objected to, but the restriction against transporting a feminine enthusiast, regardless of precautions for her safety and the protection of the general public, has aroused a storm of protest. The Washington riders assert that they will carry their case to the Supreme Court if necessary to determine the rights of motorcyclists.

FOR BUILDING INSPECTORS.

THE City of Cleveland has received two new magneto single Harley-Davidsons for use in the Building Inspector's Department, from the Lister Motorcycle Company, of East Fifty-fifth street, Cleveland. This makes a total of eleven machines delivered by the Lister Company this season to the inspectors.

TO MOVE BRANCH.

AS a result of the recent merger of the Diamond Rubber Co., and the B. F. Goodrich Company of Akron, Ohio, the B. F. Goodrich company's stock depot now located at 512 East Long street, Columbus, will be moved to 186 East Gay street, the present quarters of the Diamond Rubber Co. branch.



THE Flying Merkel machines shown in the accompanying photograph were the only motorcycles to participate in the recent automobile parade held in Altoona, Pa. The machine with the Majestic sidecar attached is the

property of W. K. Aurandt, of the Miami company, but it was entered and driven by a Mr. Young, his cousin occupying the sidecar. Mr. Rouser is shown in the center and Mr. Butts on the right.

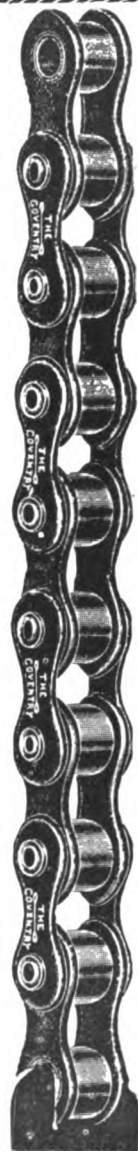
The **STRENGTH of** **"THE COVENTRY" CHAINS**

THIS illustration shows graphically the weight that every one of "The Coventry" Chains can sustain—twelve riders and their mounts—making a total weight of between 3600 and 3700 pounds.

Can you conceive of a strain exerted by a motorcycle motor that would equal this tremendous weight, which every one of "The Coventry" Chains is prepared to withstand, if need be?

You have heard of Sheffield Steel—which is the "sterling" of steel quality throughout the world. Sheffield cold-rolled steel is alone used in the manufacture of "The Coventry" Chains.

Couple its enormous strength with the other qualifications possessed by "The Coventry" Chain—silence—speed—absence of stretch or slip—and its all-around consistent efficiency, and you have the IDEAL TRANSMISSION.

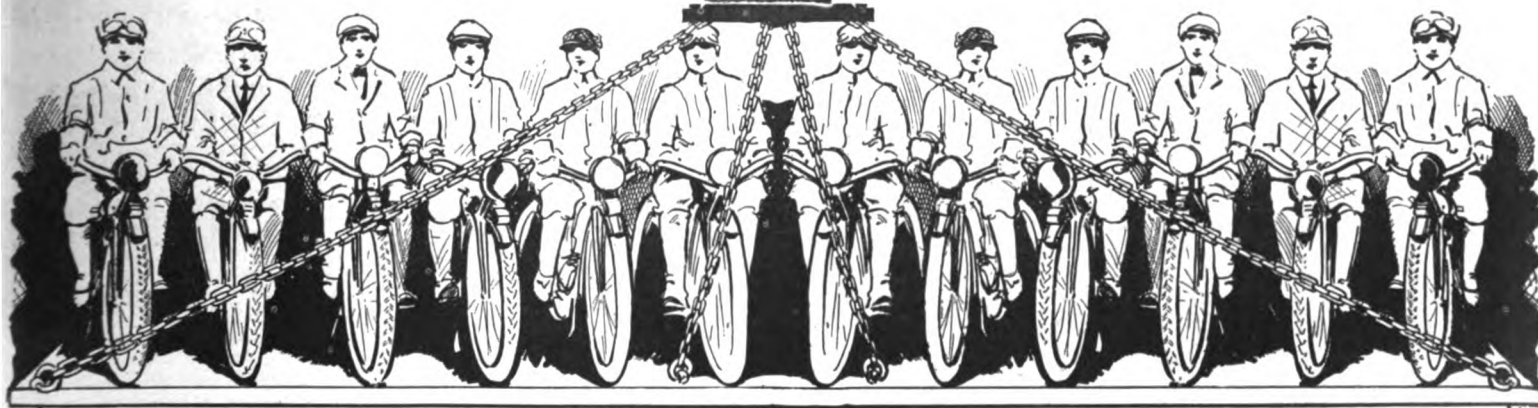


If you want to be assured of a total absence of transmission troubles on the road, if you want to get the benefit of **every ounce of energy** your motor possesses, if you want to tackle every hill, no matter how steep; every road condition, whether sand, mud or snow, with absolute confidence in your transmission, use "THE COVENTRY" Chains.

To dealers who are looking for a cheap article—the first cost of which is small, but for which the user must pay again and again in annoyances and continual repairs, we have nothing to offer. We pride ourselves on the fact that "The Coventry" Chains are more expensive, as far as first cost is concerned, than other chains. BUT—"they cost more because they are better." Quality counts in the end—and that's our "long suit."

**SARCO ENGINEERING
COMPANY**

**112 BROAD STREET
NEW YORK**



The Harley-Davidson Worcester 24-hour

425 miles in 24 hours over rough country roads and through the Berkshire mountains—the last 225 miles in a blinding rainstorm.

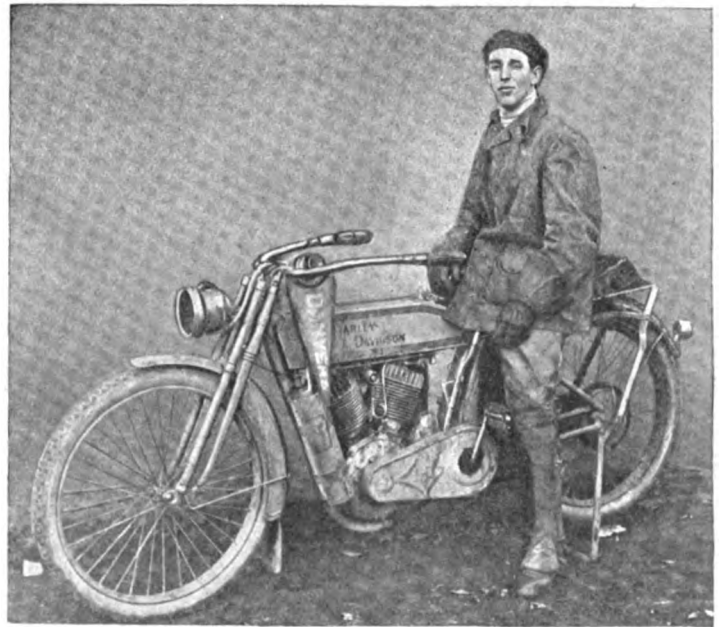
40 entries—38 actual starters—including six organized teams of four riders each, not one of which even completed the contest, to say nothing of winning a perfect score or a trophy.

son Wins the Big Endurance Contest

W. J. Walker, riding his Harley-Davidson, finished first, winning not only a perfect score of 1000 points, but the much coveted Worcester Silver Cup, and the gold medal offered for the best individual performance.

Out of a total of 38 actual starters only four riders were able to finish the contest at all. 225 miles of the run were made in a driving rainstorm. In some places the roads were next to impassable. Heavy mud—deep sand—rocky roads and a number of staggering grades in the Berkshire mountains, including the famous "Jacob's Ladder," made the contest anything but a joy ride.

The Harley-Davidson is designed for service, built for service, and finally renders actual service on the road second to none. No one thing proves it more conclusively than a strenuous endurance run.



W. J. WALKER, WINNER OF THE WORCESTER 24-HOUR ENDURANCE CONTEST
HELD SEPTEMBER 29 AND 30.

Harley-Davidson Motor Co.

291 C Street : : : : : Milwaukee, Wis.

MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

HERE'S YOUR CHANCE—1912 Reading Standard twin, with horn, lamp, tools, etc. ridden only 500 miles and in perfect condition. For sale at a low price to cash buyer. Address "S." care of MOTORCYCLE ILLUSTRATED, 31 Chambers street, New York City.

EMBLEM FOR SALE—First class condition. Complete equipment. \$125 buys it. H. C. Johnson, Quincy, Ill.

PRACTICALLY brand new Henderson, with tandem, \$225; or exchange for diamonds or automobile. "B. & M." care of MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York.

BARGAIN—Closing agency; brand new 7 h. p. chain driven Excelsior, \$225, or nearest offer. 47 William street, Newark, N. J.

FOR SALE—Schebler carburetor \$3.75; Helger carburetor \$3.75; new. H. H. Emrick, 1643 W. Monument avenue, Dayton, Ohio.

FOR SALE—Brand new 7-8 horse 1912 chain twin Harley-Davidson at substantial reduction. Customer refuses to pay for machine. Guaranteed perfect. Price and full particulars from Louis F. Bradburn, Canandaigua, N. Y.

"EUREKA"—Emergency Gasoline Tank Valve, screws in place of the ordinary gasoline tank needle valve. No soldering or altering necessary. By feeding the gasoline from a point above the bottom of the tank, it reserves one-fourth of the capacity of the tank for emergency. Removes all worry regarding gasoline supply. Made to fit Indian, M. M. R. S., Haverford, Excelsior, and Merkel. Price \$1.00, prepaid. Discount to dealers. Wm. E. Waldron, 411 N. Mercer st., New Castle, Pa.

DON'T buy a V-belt until you have seen the Duke V-chain belt. Write for circulars. J. Dukelow, 4509 Wilcox ave., Chicago, Ill.

FOR SALE—4 h. p. Indian motorcycle; good condition; \$60; bargain. K. Ward, 1215 Haddon avenue, Camden, N. J.

MAJESTIC SIDE CAR for red Indian; never used. Enamel slightly marred on fittings. \$46. Meco, Hammondsport, N. Y.

BARGAINS: Closing out all machines exchanged for new Excelsiors; Indians, Excelsiors, R. S., Marvel. Guaranteed first-class condition. Also Flanders demonstrator. Ford Motorcycle Co., White Plains, N. Y.

FOR SALE—Eclipse Free Engine Clutch, latest style lever control, V-belt style, practically new, for \$6.00. No. 1, high-pressure Brazer 10-gal. tank with gauge; used only once; will trade for auto casing, 30 x 8. A. A. Jordan, Athens, Ga.

RARE CHANCE. See Prices. Several Eclipse free engine pulleys for different makes \$12.50. Specify make and year of your machine. Speedometer \$7; lamp outfit \$4; tandem and luggage carrier \$5; cyclometer \$2; Prest-O-Lite \$8; 1912 MOTORCYCLES, never uncrated, below cost. Write to MOTORCYCLE EXCHANGE, Schenectady, N. Y.

FOR SALE—Pierce 4 cylinder 1912 model in A1 condition, slightly used. Have little time to ride. Price \$205. P. H. Chase, 81 E. Park st., Newark, N. J.

FOR SALE or Exchange—1911 4 h. p. Excelsior, \$95; 1911 Wagner 4 h. p., \$95; 1910 magn. to Harley-Davidson, \$110; Thor 1908 model, \$40. Wolke Cycle Co., Louisville, Ky.

FOR SALE—1912 twin 7 h. Indian; used but three months; in perfect running order; \$175. Will ship C. O. D. on receipt of \$25. Joseph Mattes, Odebolt, Iowa.

PATENTS

promptly obtained OR NO FEE. Trade-Marks, Caveats, Copyrights and Labels registered. TWENTY YEARS' PRACTICE. Highest references. Send model, sketch or photo. for free report on patentability. All business confidential. HAND-BOOK FREE. Explains everything. Tells How to Obtain and Sell Patents, What Inventions Will Pay, How to Get a Partner, explains best mechanical movements, and contains 300 other subjects of importance to inventors.

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Box 29 Willson Bldg. WASHINGTON, D. C.

FOR SALE—Henderson demonstrating machine with 29 x 3 tires, \$175. 1911 R. S. with clutch, \$100. Melrose Motorcycle Agency, 111 First street, Melrose, Mass.

COMPLETE line motor repair parts for 10 leading makes sent prepaid at manufacturers prices. Motorcycle Equipment Co., Hammondsport, N. Y.

FOR SALE—One new side-car for motorcycle, \$25. H. Kaskel, Spencerville, O.

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THE magazine to read if you want to keep up to date on wireless and progress in electricity. With one year's subscription to Modern Electrics for a limited time only we are making the following:—



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15c per Copy (Act quickly as our supply of the above is limited.) \$1.50 per Year

FOR SALE—Pierce 5 h. p. single, with Eclipse clutch; finest condition; black. First \$155 takes it. W. E. Gahwiller, Shaller, Iowa.

FOR SALE—Brand new 1912 Pierce 4-cylinder motorcycle, merely tested. Horn, Pierce luggage carrier, etc., \$300. A bargain; buying auto. Address "Lex," care of MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York.

INDIAN RIDERS, ATTENTION—Make your clutch lever stay where you want it by using J. & S. clutch control, the only one that will positively keep your lever from slipping, on account of the spring tension and cork insert. Can be attached in one minute. Nothing to wear out. Mailed prepaid on receipt of \$1. Mail your order today. Nelson Johnson, 1511 W. Lafayette ave., Baltimore, Md.

MISCELLANEOUS

STOLEN—Yale 1911, No. 6097, 4 h. p., flat belt, fully equipped; reward. C. B. Miller, 272 Smith street, Brooklyn, N. Y.

FOR SALE—Substantial interest in Curtiss & Marvel Motorcycle Co. to practical motorcycle parties who will put in money against stock of parts and goodwill and take active management of the motorcycle business. Entire time of present management required for our aeronautical business. Address C. R. Hall, Secretary Curtiss Motor Co., Hammondsport, N. Y.

DEALER'S CARDS, Etc.

RIVERSIDE MOTORCYCLE GARAGE—DISTRIBUTORS FOR READING STANDARD. AGENT FOR EAGLE, SECOND-HAND MOTORCYCLES, REPAIRS AND SUPPLIES. 533 W. 110 ST., NEW YORK. Tel. 5615 Morningside.

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B. & C. TWO-SPEED and free engine gears for chain-driven motorcycles of the counter-shaft type. Bushnell & Cannon, 1268 East 80th street, Cleveland, Ohio.

MOTORCYCLES—Save dealers' profits; buy direct from the owners. I have all makes on my lists. Indians and Marshes from \$20 up. Hundreds of other machines at comparatively low prices. Get my prices before purchasing. M. I. King, automobile broker, 217 West 125th street, New York City.

THE LATEST AND BEST guaranteed Motorcycle Supplies at lowest prices will be shipped same day your order is received. You get satisfaction in every package. Write for largest Motorcycle Supply Catalog ever printed. Motorcycle Equipment Co., Hammondsport, N. Y.

T. J. SIXSMITH, expert repairing; agent for R. S., Indian and Excelsior motorcycles. 208 W. 100th street, New York.

SECOND-HAND MOTORCYCLES—75 of them, \$25 up; three tri-cars, \$125, \$300 and \$550, respectively; expert repairing, experimental work, aeroplane supplies. New York Motorcycle Co., Inc., 318-320 West 48th street, New York.

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FULL LINE of N. S. U. and Flanders "4" motorcycles; N. S. U. repairs and parts, two speeds, motorcycle accessories. The Sun Motor & Supply Co., 307 Amsterdam avenue, (at 74th street), New York City.

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The 1913 R-S is practically the same as this year's—only more so

IF it were possible to improve on the R-S, the 1913 model would certainly have contained these improvements. But we are so confident of the superiority of the R-S—so assured of its absolute perfection, that we have turned our energies, that would ordinarily have gone toward evolving new features in the 1913 model, in other directions.

We enlarged our manufacturing facilities. We have directed the brains of our engineers, whose master minds first conceived "That willing winning worker," toward our factory organization. They have devoted their broad engineering knowledge toward a solution of the delivery problem.

We have "tightened up" our manufacturing facilities—discarded some methods which meant lost time and did not increase efficiency. We have retained our rigid inspection system. We have reorganized our plant on a purely engineering basis, and can assure quicker deliveries **WITHOUT SACRIFICING THAT PAINSTAKING, CONSCIENTIOUS CARE THAT IS THE BASIS OF R-S PERFECTION.**

Our catalog is ready for you.

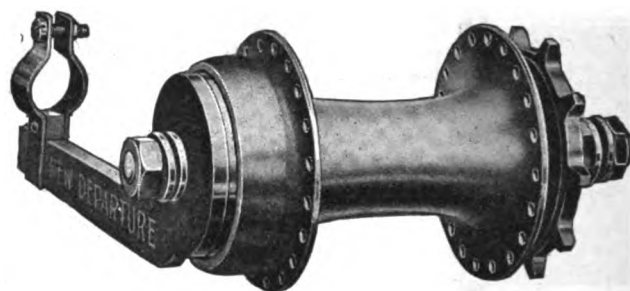
Reading-Standard Co.
306-340 Water Street, Reading, Pa.

NEW DEPARTURE

Motorcycle Specialties

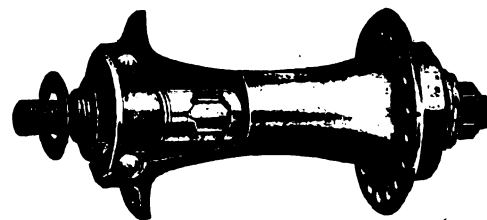
INTERNAL EXPANDING BAND COASTER BRAKE

The internal expanding band type, employing exactly the same principle as the emergency brake in the automobile. It operates against the forward movement of the wheel, hence, cannot lock, wind or bind. Riders prefer it because of its superior efficiency, reliability and strength. It is built for service beyond extreme requirements of riding. The 1912 model is absolutely the last word in a coasting and braking device for motorcycles of modern type.



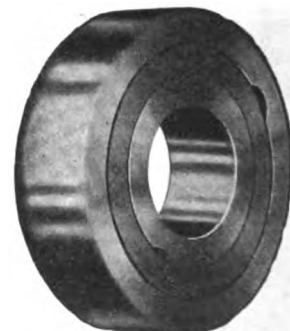
"KNOCK-OUT" AXLE HUBS FOR FRONT WHEELS

The ideal front hub, constructed entirely of specially treated steel and giving maximum strength and wear. The axle is in a sheath and can be removed instantly without disturbing the adjustment or removing any other part of the hub. It runs on eighteen $\frac{1}{4}$ -inch steel balls and is highly finished throughout. Motorcycle dealers and repairers should stock this hub. It has behind it the New Departure guarantee.



SUPERIOR BALL BEARINGS

New Departure ball bearings are an American product of guaranteed merit and offer advantages over the foreign-made bearings in price and other considerations. This bearing is made in standard sizes and can be used to replace any single row bearing of standard bore, diameter and width. Automobile garages and motorcycle repair depots should stock this bearing and save money.



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**Specify Bosch
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**Ask For The
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AS GOOD AS BOSCH MAGNETOS

THE Bosch Motorcycle Plug has met with the approval of all those who are aware that the efficiency and reliability of the engine depend upon the ignition spark. ¶ No other ignition system has ever proven as efficient, as perfect nor as reliable as that completed by the use of the Bosch Spark Plug. Made of but three principal parts, with unbreakable steatite insulator and crescent shaped electrodes, they not only prove to be an efficiency factor but will withstand the most adverse conditions in all types of engines.

A BETTER PLUG AT THE RIGHT PRICE

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TRADE MARK

FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

ROSE MANUFACTURING COMPANY

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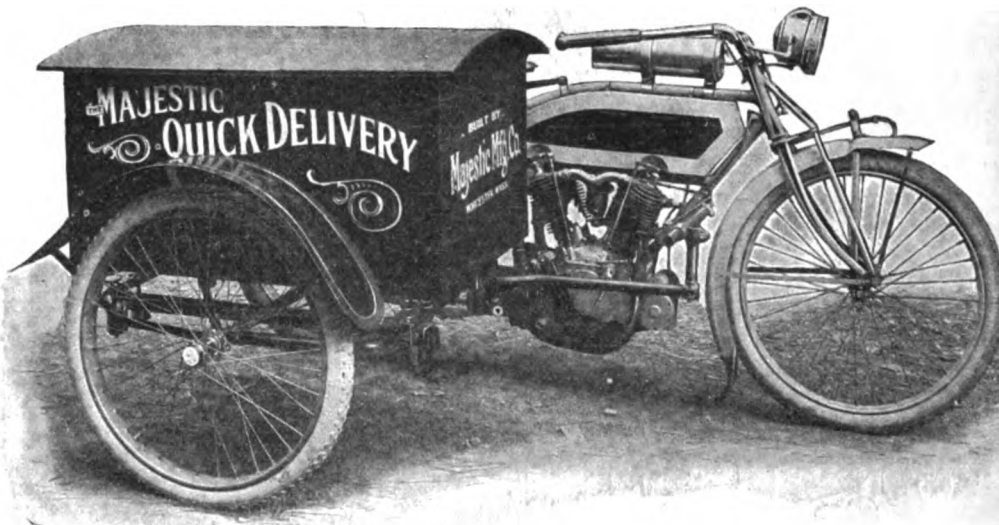


MAJESTIC COMPOUND-SPRING DELIVERY VAN

The Ideal Motorcycle Commercial Vehicle

Maple Veneer
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Seamless
Steel Tubing
and
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Guaranteed to
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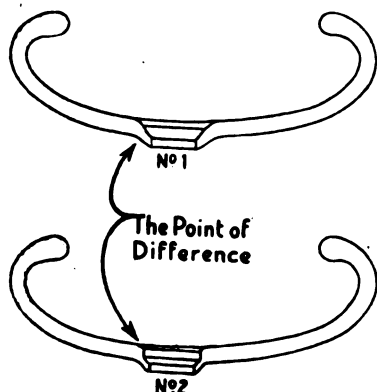
Backed by Experience.

Proven by Tests.

ALSO PASSENGER MODELS

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MAJESTIC MANUFACTURING CO. Worcester, Mass., U. S. A.



Mott Rims for Strength

THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

WRITE US FOR FULL DETAILS

THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

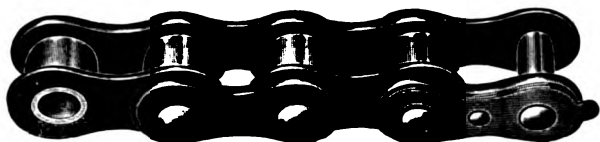
MOTT WHEEL WORKS, Utica, N. Y., Manufacturers

R. B. ABBOTT SALES CO., Sales Agents, Majestic Bldg., Detroit

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'Whitney' Chains Are Built For Strains

Every "Whitney" Chain has a reputation back of it, a reputation of having been tested in the most trying service and never failing to make good. We've made chains for years and through our untiring efforts to produce nothing but the best our chains have gained a remarkable reputation. You can't go wrong by placing a "Whitney" on your machine.



When making replacements insist on a "Whitney" and get acquainted with its merits.

The Whitney Mfg. Co.
HARTFORD, CONN.

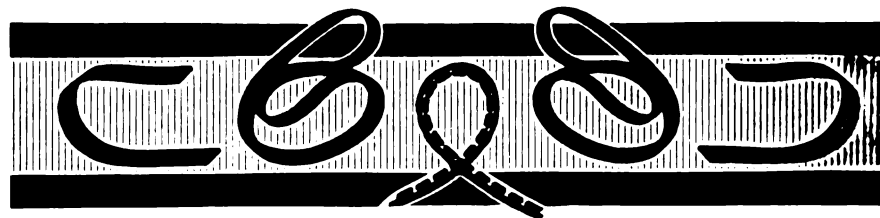
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Good Commission
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MOTORCYCLE ILLUSTRATED

51 Chambers Street

New York



Our Progressive Platform

1913 is some distance away, but we are getting ready for it now, and we don't need a telescope to see that it will be the best year yet.

Between ourselves, the 1913 SEA LION and WHITE STRIP Belts are wonders. We have watched the 1912 belts all the year and where we found opportunity for improvements, they have been made.

We could take up a lot of space telling you WHY SEA LION and WHITE STRIP Belts are the best, but you want proofs. Ask any one of the big motorcycle manufacturers, Harley-Davidson Motor Co., for instance (and you know they use only SEA LION), and see what they say. They know, if anyone does.

Our policy of co-operation with our dealers has met with such success this year, that we are going to expand that policy and want every 1913 dealer to get in touch with us. It will mean bigger profits for you, and your success is our success.

Chicago Belting Co.
124 North Green St.
Chicago

BRANCHES

New York
New Orleans
Portland, Ore.
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Tannery: Niles, Mich.

SIGN AND MAIL TO
Chicago Belting Co.
124 N. Green Street
Chicago

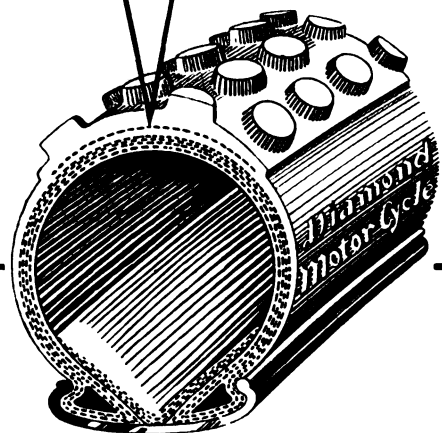
TO DEALERS

There is going to be a big motorcycle nation
cut next year, and every dealer will get a slice.
Do you want only the seeds? will get a slice.
If not, sign this and get on our mailing list.

NAME.....
ADDRESS.....

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**GETTING
DOWN
TO THE
POINT**



THE BREAKER STRIP

in the

Diamond

29" x 3" Motorcycle Tire—and the only motorcycle tire that has a breaker strip.

That breaker strip is the point. A point that no motorcycle rider can afford to overlook.

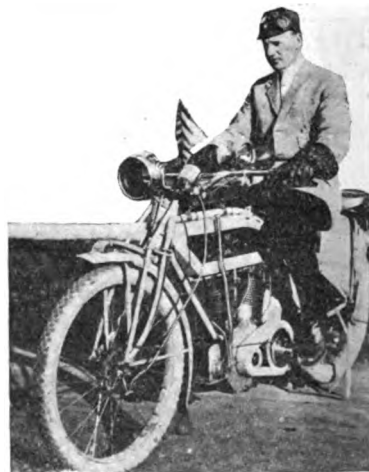
It means increased mileage, lower tire expense, and vastly increases the easy riding qualities of your machine.

It automatically takes care of overloading. It distributes shocks over a wide area instead of confining them to one spot and thus causing a fabric break and subsequent blowout.

Write for booklet.

**THE DIAMOND RUBBER CO. OF N.Y.
AKRON, OHIO**

Subsidiary of The B. F. Goodrich Co.



Have You Seen Him?

We will pay a reward of \$25.00

for recovery of Excelsior Auto-Cycle, seven horsepower, number 36654, and \$50.00 reward for recovery of machine and conviction of party shown in the illustration.

Machine secured under name of S. B. Bishop, but later information gives correct name as Welsh.

Wire information at our expense.

Excelsior Auto-Cycle Company

473 Woodward Avenue, Cor. Bagg St., Detroit, Mich.



Mobiloil

DIFFERENT motorcycles need different lubricating oils.

Some one of the several grades of Gargoyle Mobiloil will get the greatest efficiency from your motorcycle.

Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

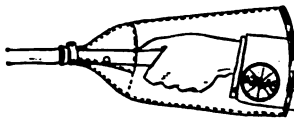
VACUUM OIL COMPANY

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Distributing warehouses in the principal cities of the world.

NOW IS THE TIME TO STOCK UP

With Atlas Fur-lined Hand Windshields and our other Cold Weather necessities.



We manufacture a complete line of Leggings, Magneto Covers, Luggage Carriers, Tail Lamps, etc.

Mohair, Wool lined, per pair, \$1.50.

Leather, Fur lined, per pair, \$2.25.

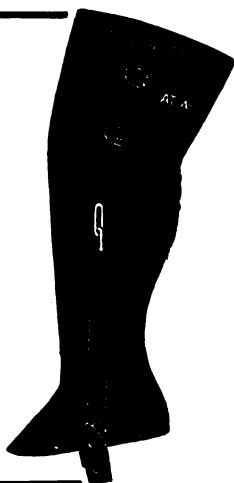
Leather Leggings, \$1.00 per pair and up.

Jobbers and Dealers get our proposition. Write for our up-to-date Catalog.



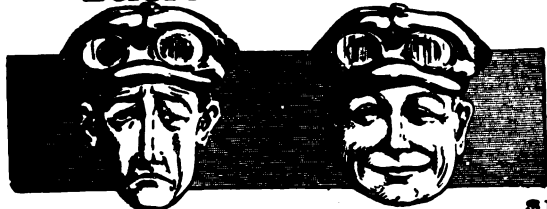
Atlas Specialty Mfg. Co.

557-63 West Jackson Blvd.
Chicago, Ill.



Before

After



**J-D Visible
Cured
This Man**

DIAGNOSIS—Ignition Trouble

PRESCRIPTION—One set J-D Visible Spark Plugs

FEE—\$1.00 per plug—money back if not absolutely satisfied

We can cure your Ignition troubles, too. The new principle embodied in the J-D VISIBLE GAP SPARK PLUG enables you to locate and cure Ignition trouble at a single glance.

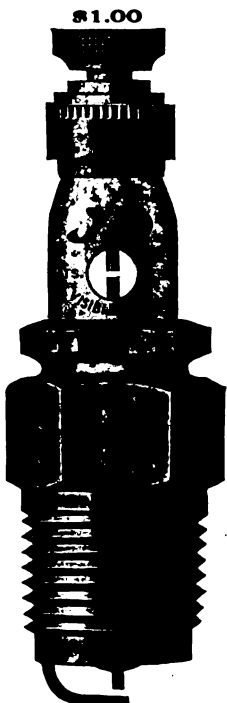
One look tells everything

Through the port in the porcelain—outside the motor—you see if the spark is jumping the gap in the central electrode. If the spark jumps, but proper ignition fails to follow, then the plug must be foul or the carburetion faulty. If the spark does not jump, then trouble lies behind in magneto or wiring or coil or batteries. Knurled adjusting nut allows you to widen or close gap. Opened, it intensifies spark and cleans point automatically. Uses minimum current, makes timing of engine easy, and permits regulating of spark in any cylinder.

If your dealer has not yet put the J-D VISIBLE PLUG in stock, we will mail you as many as you want, guaranteed, prepaid on receipt of price—just \$1.00 per plug. Write and tell us the size wanted and make of motor.

JEFFERY - DEWITT COMPANY

555 Butler Avenue, Detroit, Mich.

**Here's the Wake-'em-up Siren!**

The Acme Siren demands instant action—not only on the part of the man who hears it and "steps lively"—but also the dealer who wants to stock an article that sells on sight and means repeat orders—always. Our catalog will be sent on request.

Sarco Engineering Co.

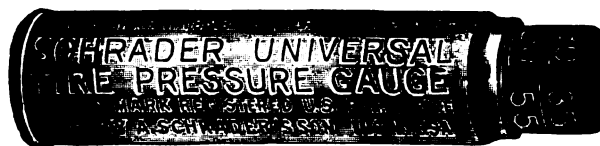
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**Have You Had Trouble With Your Tires?**

A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

Schrader Universal Tire Pressure Gauge

(Made under patent dated March 1, 1896.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

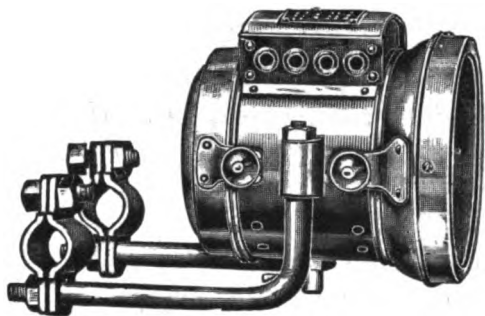
Can be obtained from all tire manufacturers, jobbers and dealers, or

A. SCHRADER'S SON, Inc.

28-30-32-33 Rose Street

NEW YORK CITY

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MOTORCYCLE SEARCHLIGHT No. 102
Showing Back Closed

JOBBER'S WRITE FOR NEW TERMS

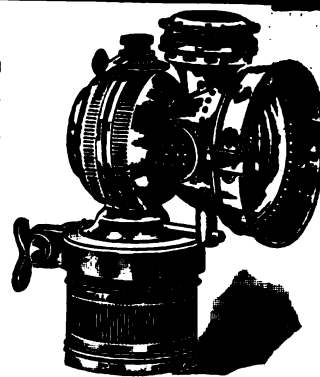
ALSO CUTS FOR USE IN YOUR 1913 CATALOGUE

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The Old Reliable Kind

Built on the lighting principle of the big naval searchlights. Throw a powerful penetrating light directly ahead (the danger point). Do not scatter the rays. The ideal lighting system with 20th Century Generators. STRONG, COMPACT, HANDSOME. Are in big demand now and ever increasing. Send for Catalogue

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BICYCLE No. 2
Combined Lamp and Generator

To Be Well Dressed

is not an indication of vanity. It is your duty to yourself and to your friends to look well.

Clothes that fit well always look well and wear well.

When you

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AURORA**

MOTORCYCLE  **CLOTHING**
BRAND

you buy clothing with

**Strength in Every Fibre
Quality in Every Thread**

Made in English Roseberry, English Whipcord,
Fustian, Petrels and Khaki.

Dealers, investigate our proposition

Fowler-Carnes Company
Aurora, Ill.

Motorcycle Valve Stems

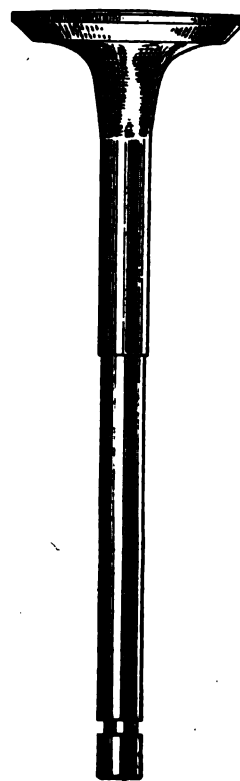
get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

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Cleveland :: :: Ohio



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Oil Proof
Vacuum Cup Tires**

PENNSYLVANIA RUBBER COMPANY
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The ONLY gas tank that, when empty, can be immediately exchanged for a full one, ANYWHERE and ALWAYS

EVERYTHING YOU NEED
The LIVE STORE of New England

Large and Complete Stock of Bicycle and Motorcycle Supplies
Reasonable Prices Prompt Shipments Catalogue Free
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ARE THE BEST
A. R. MOSLER & CO.
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\$1.50 postpaid. Give depth of tank.

Circulars on request.

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LOOK FOR THIS TRADE MARK
on all

LEGGINS—CLOTHING—SPECIALTIES

It is a guarantee of quality. Our catalog is yours for the asking.

NATHAN NOVELTY MFG. CO.

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The Baxter Side Car is Built for ALL Roads

To be really efficient a side car must be prepared to withstand the terrific strain of negotiating rough, rocky, rutty roads as well as bowling along well-paved boulevards. For this work THE BAXTER SIDE CAR is most eminently fitted.

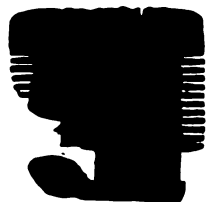
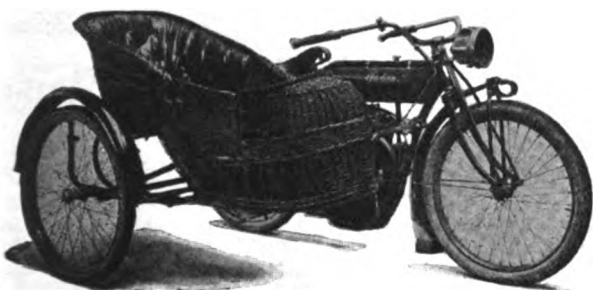
Its reinforced frame construction, its tension spring wheel, its solid Bessemer steel hub spindles, its body of Indian rattan, its heavily upholstered cushions—all tend to make it the strongest, the lightest, the most durable and, at the same time, the most comfortable side car on the market today. Prices, \$60.00 and up.

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(From Customers' Patterns Only)

Also Pattern Work

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Expressly prepared to meet the conditions of motorcycle lubrication, which differ radically from automobile lubrication.

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KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

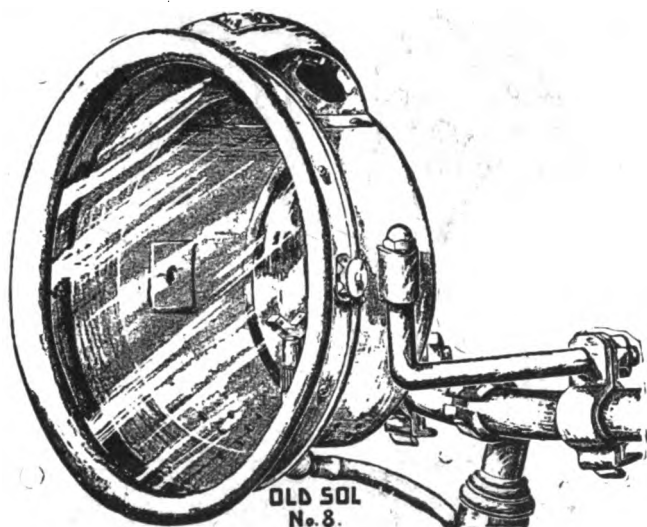
Low Cost
Durable
Efficient
Long Wearing } **TIRES**

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This is the "daddy" of the "Partners to the Sun" line. It has achieved for itself a reputation which might well be envied. We cheerfully admit that "Old Sol" No. 8 is heavier than the usual lamp. Otherwise it would not be

the largest, the strongest and most durable motorcycle lamp made.

We want the doubters to take a night trip behind a motorcycle equipped with an "Old Sol." The sense of safety, of surety which that broad beam of 1500 candlepower light affords will be a sensation new to you. Learn it. Your catalog is waiting for you to claim it.

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OR
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Afford Perfect Traction— Prevent Slipping and Skidding

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Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write Dept. B for particulars

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Two cents per week is all it costs to be a member of the F. A. M., the national organization of motorcyclists. Its strength and influence and the value of the service it can render you are directly proportioned to the number of its members. Join and ask your fellow riders to do likewise. The F. A. M. is worthy of your support. Write

Chairman Membership Committee, F. A. M.
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REMEMBER THE NUMBER "153"

When ordering this latest creation in motorcycle lamp-dom. Not an undesirable feature about it.

Every Line Perfectly Designed

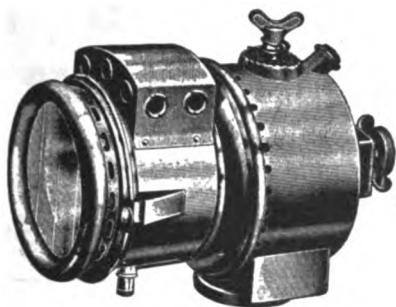
Depth, 5 in.; Dia. Door, 3 in.; Height, 5 in.; Weight, 24 ounces; Finish, nickel plate. Efficiency and Durability guaranteed.

List \$5.00

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Veeder

**Motorcycle
Trip
Cyclometer**

Adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.

Specially constructed to withstand hard motorcycle usage

Easily adjusted to any motorcycle. Made for 24, 26, 28 and 30-in. wheels.



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Price complete with bracket and striker **\$3.00**

Also makers of
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"The Big Single with Twin Power"

The Monarch is all the time surprising its riders—but always pleasantly. Undaunted by tradition surrounding this or that hill famed for its unclimbable qualities, the Monarch breezes along as if that "bugaboo" hill were not there. The Monarch rider can look with indulgence upon the man astride a single of another make. The truth of the matter is the Monarch is a twin without the trouble of two cylinders—nor the expense. It's worth your while to investigate.

Write for our catalogue I

IVES MOTORCYCLE CORPORATION
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FEDERAL

"EXTRA SERVICE"

TIRES

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Federal Tires are known everywhere as the tires of "Extra Service." Try them.

Made in Corrugated and Stud-ded treads in all sizes and in single and double clinch types

They are supplied through leading dealers everywhere. Interesting tire book mailed on request.

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Record-breaking attendances

Every possible courtesy and consideration shown
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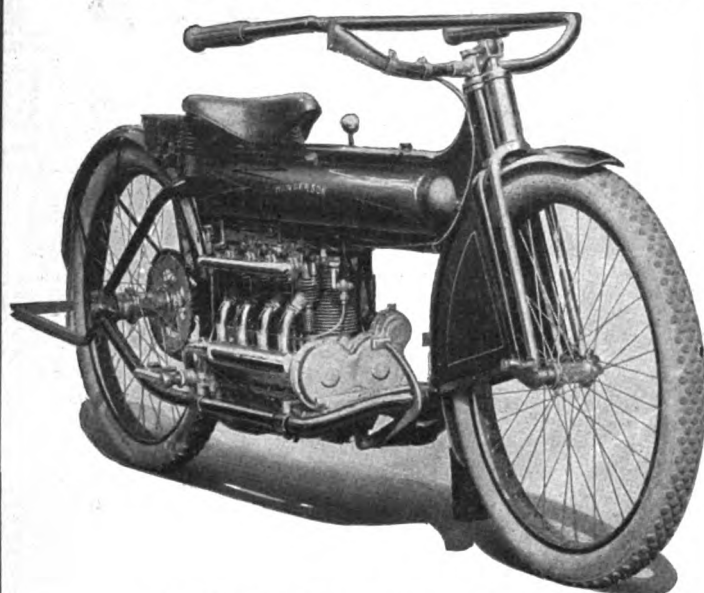


Enemies of Friction

Why don't you "Standardize"?

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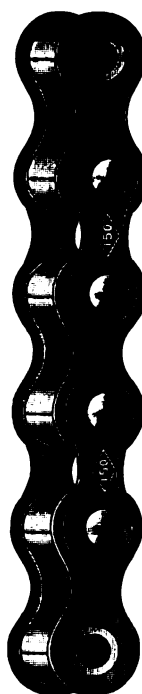


4 Cylinders, 7 horse-power—\$325

For next season we predict a success even greater
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Its great power, its exclusive ease of riding, its
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THIS NO. 150 DIAMOND ROLLER CHAIN



is the strongest of its size on the market
and makes the best chain drive for
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a pull of 3500 pounds, so you know
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DUCKWORTH CHAIN & MFG. CO., Springfield, Mass.

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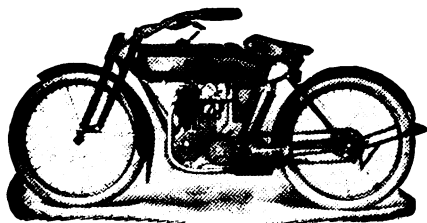
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2-Speed Minneapolis Big 5Absolute Dependability
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11½ h.p. when needed

Postal brings description
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10 H.P. TWIN MODEL

THE MINNEAPOLIS MOTORCYCLE CO. MINNEAPOLIS, MINN.**"Rex" Mica Spark Plugs**

Produce more engine power, last longer and give less trouble and more satisfaction than any other plugs. Are guaranteed soot proof and will give an absolutely hot spark.

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Motorcycle
use a**HEITGER
Carburetor**PERFECT CONTROL
From 1 to 100 MilesMore Speed
More Satisfaction
More Economy

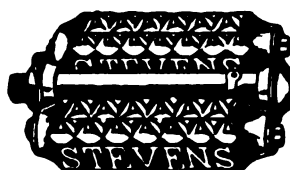
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Celebrated Motorcycle Pedals
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BLUEMEL'S CELLULOID
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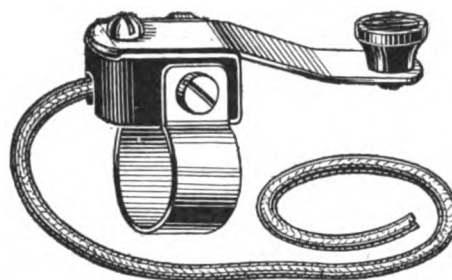
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Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape. 50c per Roll—send for some today and save your belt. State width.

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Don't depend solely upon your delicate grip control mechanism. If it should refuse to work at a critical moment, — there'd be trouble. Get a

SIMPLEX MAGNETO CUT-OUT

Price 50c, or complete with cable, 75c. By mail, postpaid. We also make the celebrated Simplex Side Cars. Let us send you our booklet

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Our products for the
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Emergency Axles, Sager
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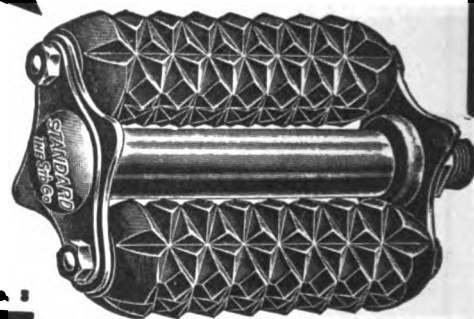
Write for our catalog. Standard quality plus
Standard output mean big business for you,
Mr. Dealer.

THE STANDARD COMPANY

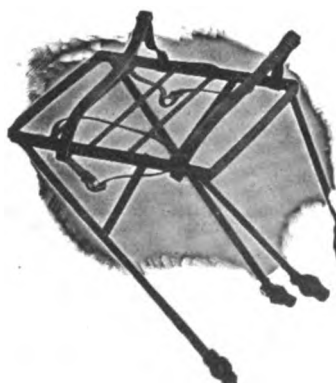
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No other pedals give that "turkish carpet" feeling to the feet. The deep rubber corrugations in the big cushions keep the feet where they are put—they eliminate jars, bumps and other disagreeable features when negotiating rough roads.

With one eye to *durability* and the other to *comfort* we have succeeded in producing the ideal motorcycle pedal.



No. 1



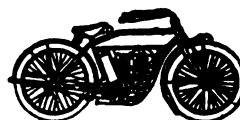
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Universal Attachment for the Motorcycle—
Sold by the
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AT 1/4 to 1/3 THE PRICE WHEN NEW

We specialize in selling standard makes of motorcycles and automobiles in slightly used condition.

Large assortment of used motorcycles, single, two and four cylinders; chain, belt or shaft driven—Indian, Pierce, R-S, Excelsior, Cartiss, F. N., N. S. U., M. M., Harley-Davidson, Thor, New Era, Merkel and other high-grade makes from \$35 up.

Practically all styles and makes of automobiles at \$100 up.
We guarantee each purchase to be in perfect running condition.

Agents wanted everywhere.

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is once used.

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We know it and stand ready to
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A-K Spring Carriers
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A-K Side and Stand Extensions
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350 Routes over the best
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56 Pages

15 cents postpaid

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and
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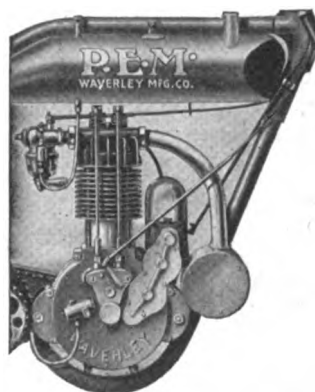


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Grossman Co.,
Mfrs.
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FACTORY AND
BRANCH
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**Economy Is The Keystone
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If you want to make the first long step
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guaranteed motorcycle supplies and
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Money.

OBERWEGNER MOTOR CO.
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1913 Agencies Open

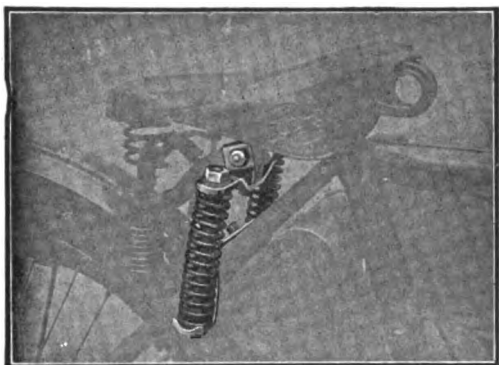
Our factory facilities have been in-
creased so that now we can care for
many times the business we had in 1912.
Those dealers, as our competitors, who
were disappointed in the machines they
sold should look into the merits of

The P. E. M.

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be proud to sell them. In this small
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these new machines, but if you are in-
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Equip your motorcycle with a Y-A Shock Absorber "That absorbs the shock."

Make every ride a pleasure ride.

The last word in shock absorbers.

An absolute necessity for real comfort.

Demand the only real "jolt-killer."

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THE "MILITAIRE" is built in *anticipation* of the logical evolution of the motorcycle. It is the result of keen study of traffic and other conditions in this country, and we unhesitatingly affirm that the "MILITAIRE" is better fitted to cope with road conditions than any other motorcycle on the market. It is radical, we admit, but so was Fulton's steamboat, and Marconi's wireless, and Westinghouse's brake.

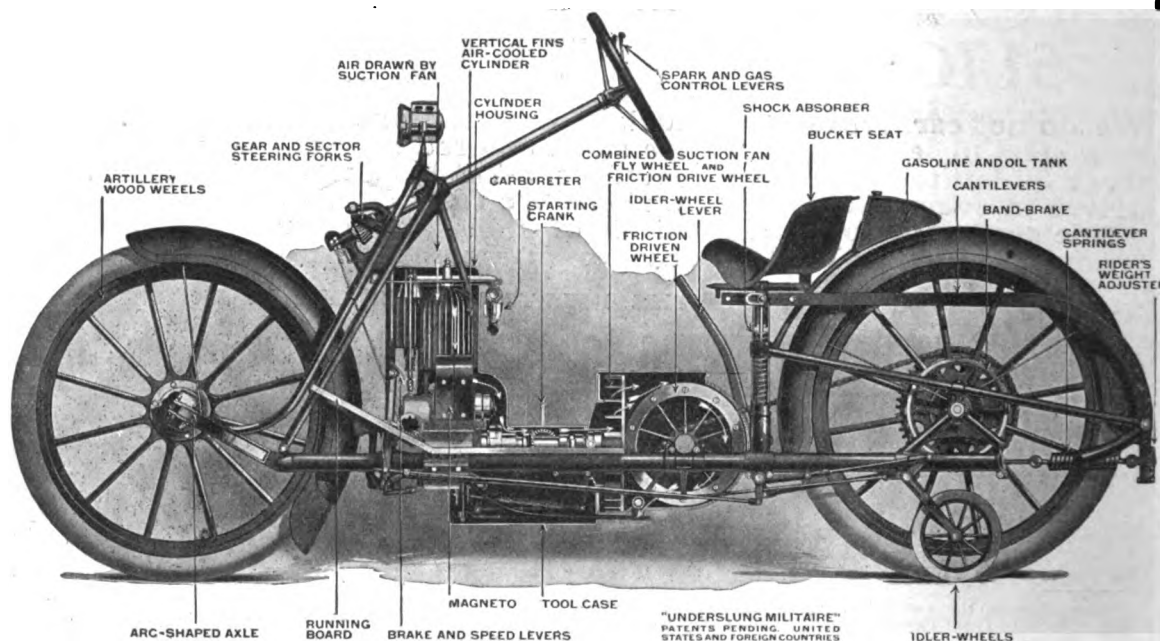
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Prices have "TUMBLER"—Are you "HIP" to "WHIP"? He's handing them out fast. Ask for DATED LIST. If you delay you lose, if decide you win. Now's the time to buy a good, used machine (and buy it right). We ship to all points. We are RESPONSIBLE; if you don't know "Whip" ask any real motorcycle man or any large dealer.

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Delivers a larger volume of properly mixed gas than any other motorcycle carbureter in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

At over 3,500 revolutions it is just as effective.

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1913

THE
HENDEE
MANUFACTURING
CO.

THE *Indian* MOTORCYCLE

PRESIDENT'S ANNOUNCEMENT



YOU ARE HANDED HEREWITH THE ADVANCE catalogue of the Indian Motorcycle for 1913—which is by far the most important document of its kind ever issued in the industry.

Yet, full as it is of details of fresh practical achievements, and conclusive records of flawless past performance, I could not be satisfied, as president of this company, to have it go without a preface touching upon the personal, the sentimental side if you will, of the splendid success in which we are associated.

Our success has been great. Year after year we have led. The great majority of motorcyclists are our fast patrons, because we have given overwhelmingly the best value, the best service in motorcycle improvement.

Every time we have sold an Indian we have made a lasting friend. And it is this we most congratulate ourselves upon.

We have dealt cleanly and fairly with our motorcycle purchasers, with ourselves among ourselves, and with our competitors. I do not believe there is a business on earth in which a finer spirit and feeling exists than among the makers, the agents and the riders of Indian Motorcycles. Verily, we are a great, grand tribe.

And now, on the threshold of the new year 1913, with a record breaking season before us—a minimum of 35,000 machines equipped with the crowning feature of all motorcycle improvements, the Cradle Spring Frame—we can continue to measure our success, not by the commercial standard alone, but by the tremendously widened circle of friendship and mutual respect to which our achievements and our business habits entitle us.

To me, and to all of us, it is not so great a thing to make and to sell 35,000 Indians for the coming year, as it is to know that for every purchaser the value received will be greater than ever before.

I commend you to the following pages.

With best wishes,

Geo. M. Hendee

President



The Indian Motorcycle for 1913

IN ANNOUNCING the new models of the INDIAN MOTORCYCLE for the 1913 season, a brief review of the exploits of this famous machine during the past year and its ever widening field of use will be of practical interest.

Records

Today the INDIAN holds every speed record officially accepted by the Federation of American Motorcyclists, besides numerous other contests and championships held under the auspices of that body. The INDIAN carried off the classic motorcycle event of England last year, the Tourist Trophy Endurance Contest, and this year the classic of France, the Grand Prix. "300 miles in under 300 minutes" was another INDIAN achievement in England this year.

Practical Utility

The INDIAN is more and more becoming recognized as the motorcycle of practical efficiency, entirely apart from its popularity as the tourist's motorcycle and its prowess on the track. Municipal bodies equip their police squads with it. Gas companies, telephone companies, railroad and rural postal delivery men have come to regard the INDIAN as the most practical, reliable and economical motorcycle for use in the accomplishment of their respective duties.

The Hedstrom Motor

1912 has further demonstrated the well known efficiency of the Hedstrom motor, used on all INDIAN MOTORCYCLES. It is universally recognized as one of the most powerful, flexible and reliable motors in the world. Not only has it conclusively proven its remarkable capacity for speed, but for hill climbing, long distance and endurance runs the Hedstrom motor has established a reputation second to none in the gas engine field. On rough roads, mountainous country and in all conditions of weather the Hedstrom motor sustains a reliable and steady level of efficiency. The rider is always assured of plenty of reserve power, which he can call upon at will when encountering steep hills and strong head winds. In the 1913 INDIANS the motor connecting rod is fitted with roller bearings. No other improvement in the Hedstrom motor was possible or necessary.

The Factory

In order to facilitate the production of our 1913 models, we have enlarged our factory. The modest plant of ten years ago has gone on increasing in capacity with the growth of the INDIAN'S fame and popularity. Now the plant consists of four buildings, with a storehouse capable of holding five thousand crated motorcycles.

The INDIAN factory now covers over seven and a half acres of floor space and is equipped with the most modern machinery, some pieces of which are our own

original design and are marvels of labor-saving ingenuity. It is estimated that when in full operation the capacity of the INDIAN factory will be a complete motorcycle every three minutes of the working day.

Improvements in the 1913 Indian

The outstanding feature of the 1913 INDIAN is the CRADLE SPRING FRAME, fitted to all models. This is the most revolutionary and epoch making departure from established systems of motorcycle spring devices. Nothing like it has ever before been attempted. Eighteen months of severe test and experimentation by our engineering department was devoted to the perfecting of this new device.

The CRADLE SPRING FRAME is, briefly, the application to the rear of the machine of the spring principle which has proved so successful during the past three years in connection with the front fork.

Extending back horizontally from the frame-joint cluster below the saddle, flanking the rear mud guard, are two seven-leaf Chrome Vanadium steel springs. The "C" shaped curls at the rear end of these springs are connected by stays to bell-cranks on which the rear axle is hung. The forward end of the rear fork has a hinge joint which enables the wheel to yield to imperfections of road surface. All shocks are completely absorbed by the leaf springs. The rear wheel can go through almost any vertical motion without affecting the body of the machine. There is no "bottom" to this spring device.

On the roughest road the rider is conscious only of the smooth, forward gliding motion. The lightest or heaviest rider feels no jar and the life of the machine is greatly increased. The INDIAN MOTORCYCLE is now leafspring fore and aft. This marks the first departure from the inefficient spiral spring system of yesterday.

In addition to the CRADLE SPRING FRAME, the 1913 INDIAN embodies ten other important improvements which will be appreciated by all riders.

New Style Rims—Single Clinch type, permitting the use of either $2\frac{3}{4}$ inch or 3 inch tires.

Larger Tires—All 1913 INDIANS are equipped with $2\frac{3}{4}$ inch tires as against the $2\frac{1}{2}$ inch tires of 1912. The widening of forks both fore and aft also allows ample clearance for the use of anti-skid chains in addition to the larger tires.

Wider Mud Guards—With splashers to correspond, affording complete protection in riding through oil or muddy roads.

Rear Chain Guard—Covering upper stretch of long chain, giving perfect protection to chain, sprocket and band brake.

Luggage Carrier—New type with tool bag at rear, fitted to all 1913 INDIAN models without extra charge. Advantageous for commercial, tourist or general use.

Foot Boards—Fitted to regular 4 H. P. and 7 H. P. INDIANS for 1913 in addition to pedals. This feature gives the rider a choice of two comfortable riding positions with complete control of the machine assured in each instance.

Foot Brake Lever—A lever close to the left foot rest, now operating Corbin improved band brake with same action as pedals.

Multiple Disc Clutch—Large size, as used on last year's 7 H. P. INDIANS, now fitted to all 1913 models.

Saddle—Improved INDIAN-Mesinger type, affording the rider a lower and more comfortable position.

Note—All INDIAN models for 1913 will be chain drive. No belt driven machines will be made. All 1913 models will be finished in Indian red.

The 1913 7 H. P. Twin-Cylinder Indian

The rider who is familiar with the basic essentials in what he regards as a motorcycle of the first rank will find the 1913 INDIAN "Twin" as complete and satisfying as the most exacting demands could require.

First, the primary essentials of Power, Speed, Comfort, Reliability and Ease of Control are positively superb in each instance. These things should be found in every motorcycle worthy of recognition. Then come those numerous little refinements which lift the INDIAN "Twin" out of the ranks of the merely adequate and place it in the very forefront of the elect. In the 1913 model not the smallest opportunity has been overlooked to increase the comfort and convenience of the rider and to further elevate the machine towards the pinnacle of mechanical perfection. With truth we can claim that the INDIAN "Twin" is almost automatic in its operation. Can be run as slow as two miles an hour in traffic. The rider has very little "driving" to do. In fact his efforts are practically confined to control, which in the INDIAN is instantaneous and positive. The novice will find the INDIAN "Twin" perfectly within his natural powers of management. To anybody who has ever ridden a bicycle, the INDIAN "Twin" presents no problems of operation. A few minutes instruction in the general principles of the motor and transmission and a little practice in working the simple control devices—that's all. Earnestly recommended as the most satisfactory all-around motorcycle model on the market.

Details of the INDIAN "Twin" will be found elsewhere in these pages.

Tourist Trophy Two-Speed Models

For 1913 the Tourist Trophy models will be built in both the 4 H. P. single and 7 H. P. twin cylinder sizes as last year, but both will be fitted with the two-speed gear.

The striking characteristic of the T. T. machines is that they are provided with a foot starting device which is a model of convenience and ingenuity, and enables the rider to start his machine by a light kick of the foot upon a lever.

A very powerful double brake is fitted to the T. T. models. This is operated by a foot lever on the right side of the machine and also by a grip lever on the left handle bar. The double action consists of expansion and contraction of two bands, inside and outside a brake drum.

Another valuable feature of this model is the improved rear hub. This is of extra large size, and runs on improved ball bearings which are absolutely frictionless. In both front and rear hubs a knockout axle is used, which enables the wheels to be removed without interfering with the adjustment of the bearings.

The T. T. models have no pedals, but are provided with comfortable foot boards upon which to rest the feet. These foot boards are hinged so they can be folded up out of the way to economize space in storing.

The T. T. Two-Speed INDIAN embodies every refined detail in motorcycle construction and forecasts the motorcycle of the future. It appeals to those who want only the very pinnacle of motorcycle perfection. With the new Cradle Spring Frame, the 1913 T. T. is positively the last word in motorcycle design. There are at present over 3,000 T. T. INDIANS on the road.

Output

Of the 1912 model, 19,750 INDIANS have been made, sold and delivered and are now on the road. Although we thought we had anticipated the INDIAN demand for 1912, we were compelled to disappoint thousands who failed to order in time. For 1913, we will produce 35,000 machines. This figure we hope will meet the demand for the coming year.

New Branch in the South

A new distributing and service branch of The Hendee Mfg. Co., has been opened in Atlanta, Ga., for the benefit of the Southern trade. This branch will cover the territories of Georgia, Florida, North and South Carolina, Alabama, Mississippi and Tennessee. The needs of Southern riders of the INDIAN can thus be catered to more readily. Complete stock of parts for all INDIAN models, new and old, will be at the service of INDIAN riders.

THE HENDEE MANUFACTURING COMPANY

(Largest Motorcycle Manufacturers in the World)

SPRINGFIELD, MASS.

Chicago: 1251 Michigan Avenue
Denver: 138 Sixteenth Street

London: 184 Gt. Portland Street

San Francisco: 234 Van Ness Avenue
Atlanta: 457 Peachtree Street



SPECIFICATIONS

4 H. P. Single Cylinder 30.50. Regular Model - - - - \$200.00 f. o. b. Factory

Motor—Hedstrom, air cooled (4 h. p.), bore $3\frac{1}{4}$ inch, stroke 3.43-64 inch, piston displacement 30.50 cubic inches.

Carburetor—Hedstrom improved, automatic, compensating, with auxiliary jet.

Valves—Both inlet and exhaust mechanically operated and constructed of the best alloys suitable for the purpose.

Ignition—Improved high tension enclosed magneto.

Spark Plug—Hedstrom Mica.

Muffler—Indian latest improved with tail pipe. Quiet and efficient.

Lubrication—Automatic, constant, positive feed, by mechanically operated pump. Hand operated pump also fitted for emergency.

Oil Gauge—Direct sight, opening to improved reservoir in base.

Handle Bars—Graceful in design, and fitted with "Rough Rider" grips.

Control—Indian patented leverless, double grip "twist-of-the-wrist" system.

Transmission—Roller chain drive, Indian improved. Free engine clutch. Drive chains and sprockets, efficiently protected by guards. Pedaling gear, 50 inches. Drive gear $5\frac{1}{2}$ to 1. Options. Chain $\frac{1}{4}$ inch, roller $\frac{3}{8}$ inch pitch.

Tanks—Gasoline capacity, $2\frac{1}{2}$ gallons. Improved sure-tight gasoline cut-off built into tank. Cap fitted with priming syringe. Oil capacity 2 quarts.

Frame—Indian Cradle Spring Frame. Indian patented bridged reinforcement throughout, scientifically braced and fitted with luxurious twin springs of highly tempered chrome vanadium steel. Height $18\frac{1}{4}$ inches.

Fork—Indian Cradle Spring Fork, scientifically braced and with long luxurious spring of highly tempered chrome vanadium steel. Fork crown, drop forgings.

Wheel Base—55 inches.

Wheels—28 inch diameter, 36 inch spokes front and rear. Rims heavy single clinch. Finished to match frame. Heavy spokes.

Guards—Improved beaded mud guards, front and rear, with front extension and splashers to correspond. 4 7-16 inches wide.

Tires—United States studded, single clinch, 28 inches by $2\frac{3}{4}$ inches detachable.

Brake—Improved Corbin Coaster Band Brake operated either by back pedaling or from brake lever on foot board.

Stand—A substantial folding stand fitted on all models.

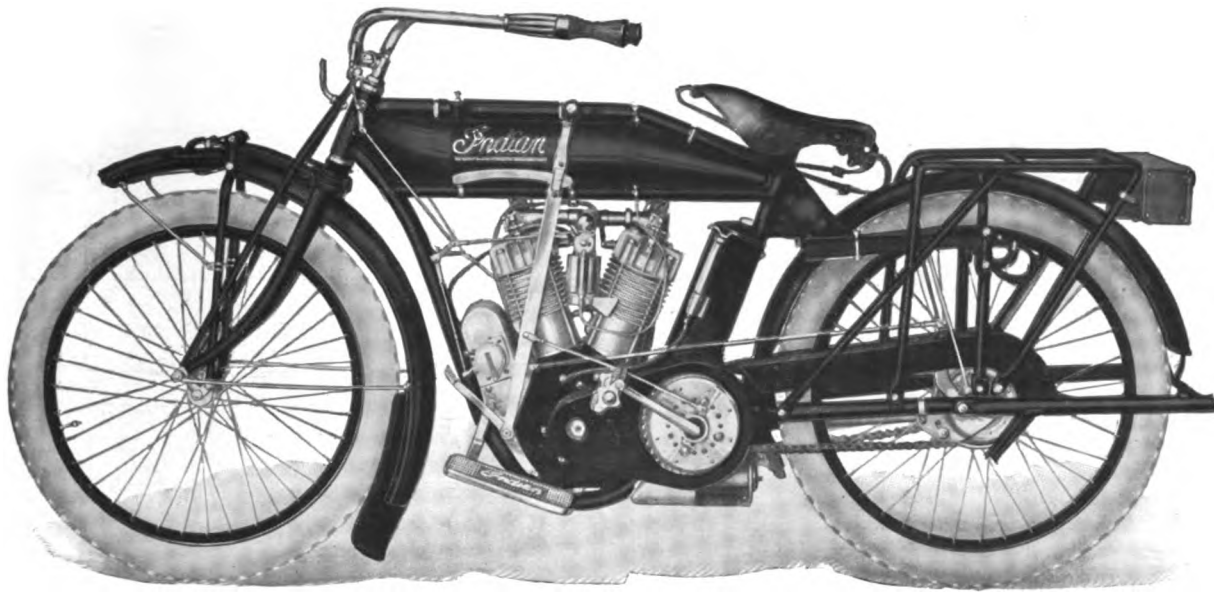
Saddle—Improved Indian Mesinger, allowing a very low saddle position.

Finish—Indian red, all bright parts nicked over heavy coat of copper.

Tool Box—Large leather tool box attached to rear of luggage carrier containing complete set of tools, and repair outfit.

Luggage Carrier—Heavily constructed. Neat in design. Finished to match frame.

Foot Boards—Hinged construction to permit folding up.



SPECIFICATIONS

7 H. P. Twin-Cylinder 61. Regular Model \$250.00 f. o. b. Factory

Motor—Hedstrom improved, air cooled (7 h. p.), bore $3\frac{1}{4}$ inches, stroke 3 43-64 inches, piston displacement 61 cubic inches.

Carburetor—Hedstrom improved, automatic, compensating, with auxiliary jet.

Valves—Both inlet and exhaust mechanically operated and constructed of the best alloys suitable for the purpose.

Ignition—Improved high tension enclosed magneto.

Spark Plug—Hedstrom Mica.

Muffler—Indian latest improved with tail pipe. Quiet and efficient.

Lubrication—Automatic, constant, positive feed, by mechanically operated pump. Hand operated pump also fitted for emergency.

Oil Gauge—Direct sight, opening to improved reservoir in base.

Handle Bars—Graceful in design, and fitted with "Rough Rider" grips.

Control—Indian patented leverless, double grip "twist-of-the-wrist" system.

Transmission—Roller chain drive, Indian improved. Free engine clutch. Drive chains and sprockets efficiently protected by guards. Pedaling gear, 50 inches. Drive gear 4 to 1. Options. Chain $\frac{1}{4}$ inch, roller $\frac{1}{8}$ inch pitch.

Tanks—Gasoline capacity, $2\frac{1}{2}$ gallons. Improved sure-tight gasoline cut-off built into tank. Cap fitted with priming syringe. Oil capacity 2 quarts.

Frame—Indian Cradle Spring Frame, Indian patented bridged reinforcement throughout, scientifically braced and fitted with luxurious twin springs of highly tempered chrome vanadium steel. Height $18\frac{1}{4}$ inches.

Fork—Indian Cradle Spring Fork, scientifically braced, and with long luxurious spring of highly tempered chrome vanadium steel. Fork crown, drop forgings.

Wheel Base—55 inches.

Wheels—28 inch diameter, 36 inch spokes front and rear. Rims heavy single clinch. Finished to match frame. Heavy spokes.

Guards—Improved beaded mud guards, front and rear, with front extension and splashes to correspond, 4 7-16 wide.

Tires—United States studded, single clinch, 28 inches by $2\frac{1}{4}$ inches detachable.

Brake—Improved Corbin Coaster Band Brake operated either by back pedaling or from brake lever on foot-board.

Stand—A substantial folding stand fitted on all models.

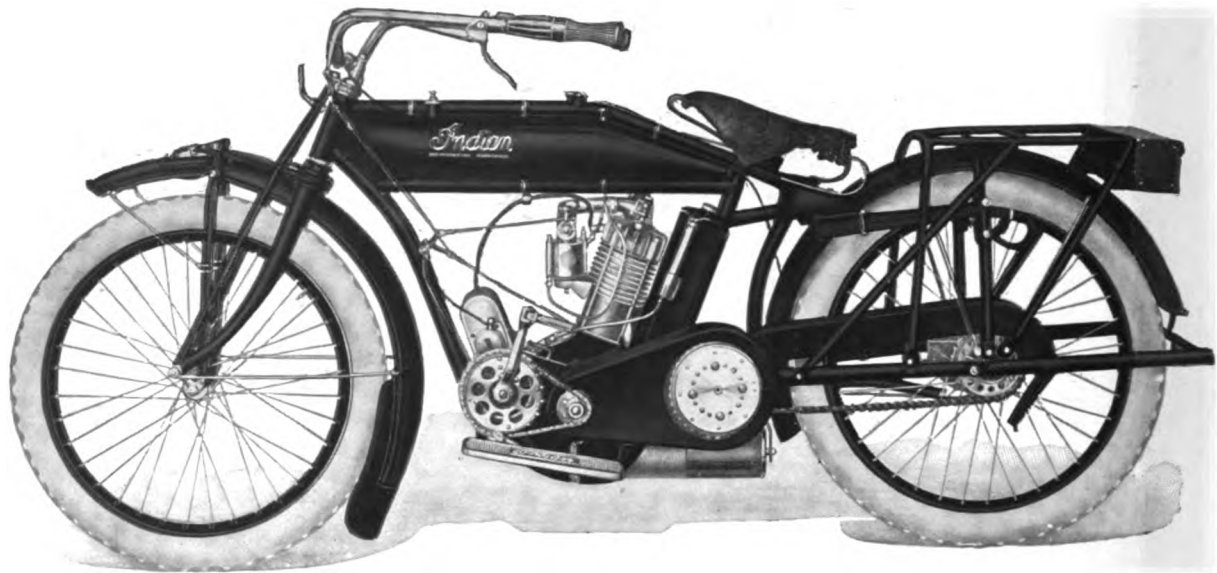
Saddle—Improved Indian Mesinger, allowing very low saddle position.

Finish—Indian red, all bright parts nicked over heavy coat of copper.

Tool Box—Large leather tool box attached to rear of luggage carrier containing complete set of tools, and repair outfit.

Luggage Carrier—Heavily constructed. Neat in design. Finished to match frame.

Foot Boards—Hinged construction to permit folding up.



SPECIFICATIONS

4 H. P. Single Cylinder 30.50. T. T. Two-Speed Model - - \$275.00 f. o. b. Factory

Motor—Hedstrom improved, air cooled (4 h. p.), bore $3\frac{1}{4}$ inches, stroke 3 43-64 inches, piston displacement 30.50 cubic inches.

Carburetor—Hedstrom improved, automatic, compensating with auxiliary jet.

Valves—Both inlet and exhaust mechanically operated and constructed of the best alloys suitable for the purpose.

Ignition—Improved high tension enclosed magneto.

Spark Plug—Hedstrom Mica.

Muffler—Indian latest improved with tail pipe. Quiet and efficient.

Lubrication—Automatic, constant, positive feed, by mechanically operated pump. Hand operated pump also fitted for emergency.

Oil Gauge—Direct sight, opening to improved reservoir in base.

Handle Bars—Graceful in design, and fitted with "Rough Rider" grips and magneto cut-out.

Control—Indian patented leverless, double grip "twist-of-the-wrist" system. 2-speed control operated by small lever mounted on top bar of the frame convenient to the right hand of the rider.

Transmission—Roller chain drive, Indian improved. Free engine clutch 2-speed gear. Drive chains and sprockets efficiently protected by guards. Drive gear 5 to 1. Options. Chain $\frac{1}{4}$ inch, roller $\frac{5}{8}$ inch pitch. The Indian 2-speed gear provides for a reduction of 40% between the direct drive and low speed.

Tanks—Gasoline capacity $2\frac{1}{2}$ gallons. Improved sure tight gasoline cut-off built into tank. Cap fitted with priming syringe. Oil capacity 2 quarts.

Frame—Indian Cradle Spring Frame. Indian patented bridged reinforcement throughout, scientifically braced and fitted with luxurious twin springs of highly tempered chrome vanadium steel. Height, $17\frac{3}{4}$ inches.

Fork—Indian Cradle Spring Fork, scientifically braced and with long luxurious spring of highly tempered chrome vanadium steel. Fork crown, drop forgings.

Wheel Base—58 inches.

Wheels—28 inch diameter, 36 inch spokes front and rear. Rims heavy single clinch. Finished to match frame. Heavy spokes. Improved rear hub of extra large size running on improved frictionless ball bearings. Front and rear hub provided with knock-out axle enabling the wheels to be removed without interfering with the adjustment of the bearings.

Guards—Improved beaded mud guards, front and rear, with front extension and splashers to correspond, 4 7-16 inches wide.

Tires—United States studded, single clinch 28 inches by $2\frac{3}{4}$ inches detachable.

Brake—Improved double brake with internal brake bands expanding within a brake drum and operated by a foot lever conveniently placed. Also a second brake band which contracts on the outer circumference of the same brake drum and is operated by a grip lever on the left handle bar. These brakes are more powerful than any other and are so absolutely simple that there is nothing to get out of order.

Stand—A substantial folding stand fitted on all models.

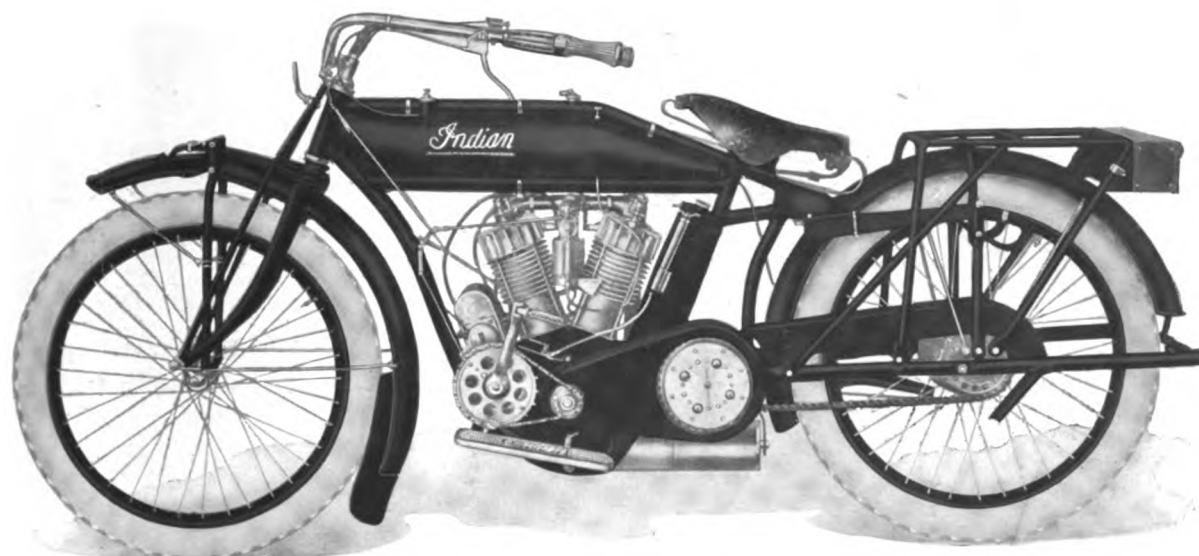
Saddle—Improved Indian Mesinger, allowing very low saddle position. Option No. 4 or No. 5 Cavalry.

Finish—Indian red, all bright parts nicked over heavy coat of copper.

Tool Box—Large leather tool box attached to rear of luggage carrier containing complete set of tools and repair outfit.

Luggage Carrier—Heavily constructed. Neat in design. Finished to match frame.

Foot Boards—Hinged construction to permit folding up.



SPECIFICATIONS

7 H. P. Twin-Cylinder 61. T. T. Two-Speed Model - - - - \$325.00 f. o. b. Factory

Motor—Hedstrom improved, air cooled (7 h. p.) bore $3\frac{1}{4}$ inches, stroke 3 43-64 inches, piston displacement 61 cubic inches.

Carbureter—Hedstrom improved, automatic, compensating with auxiliary jet.

Valves—Both inlet and exhaust mechanically operated and constructed of the best alloys suitable for the purpose.

Ignition—Improved high tension enclosed magneto.

Spark Plug—Hedstrom Mica.

Muffler—Indian latest improved with tail pipe. Quiet and efficient.

Lubrication—Automatic, constant, positive feed, by mechanically operated pump. Hand operated pump also fitted for emergency.

Oil Gauge—Direct sight, opening to improved reservoir in base.

Handle Bars—Graceful in design, and fitted with "Rough Rider" grips and magneto cut-out.

Control—Indian patented leverless, double grip "twist-of-the wrist" system. 2-speed control operated by small lever mounted on top bar of the frame, convenient to the right hand of the rider.

Transmission—Roller chain drive, Indian improved, Free engine clutch 2-speed gear. Drive chains and sprockets efficiently protected by guards. Drive gear $3\frac{1}{2}$ to 1. Options. Chain $\frac{1}{4}$ inch, roller $\frac{3}{4}$ inch pitch. The Indian 2-speed gear provides for a reduction of 40% between the direct drive and low speed.

Tanks—Gasoline capacity $2\frac{1}{2}$ gallons. Improved sure-tight gasoline cut-off built into tank. Cap fitted with priming syringe. Oil capacity 2 quarts.

Frame—Indian Cradle Spring Frame. Indian patented bridged reinforcement throughout, scientifically braced and fitted with luxurious twin springs of highly tempered chrome vanadium steel. Height $17\frac{3}{4}$ inches.

Fork—Indian Cradle Spring Fork, scientifically braced and with long luxurious spring of highly tempered chrome vanadium steel. Fork crown, drop forgings.

Wheel Base—58 inches.

Wheels—28 inch diameter, 36 inch spokes front and rear. Rims heavy single clinch. Finished to match frame. Heavy spokes. Improved rear hub of extra large size running on improved frictionless ball bearings. Front and rear hub provided with a knock-out axle enabling the wheels to be removed without interfering with the adjustment of the bearings.

Guards—Improved beaded mud guards, front and rear, with front extension and splashers to correspond, 4 7-16 inches wide.

Tires—United States studded, single clinch 28 inches by $2\frac{3}{4}$ inches detachable. Option 3 inch.

Brake—Improved double brake with internal brake bands expanding within a brake drum and operated by a foot lever conveniently placed. Also a second brake band which contracts on the outer circumference of the same brake drum and is operated by a grip lever on the left handle bar. These brakes are more powerful than any other and are so absolutely simple that there is nothing to get out of order.

Stand—A substantial folding stand fitted on all models.

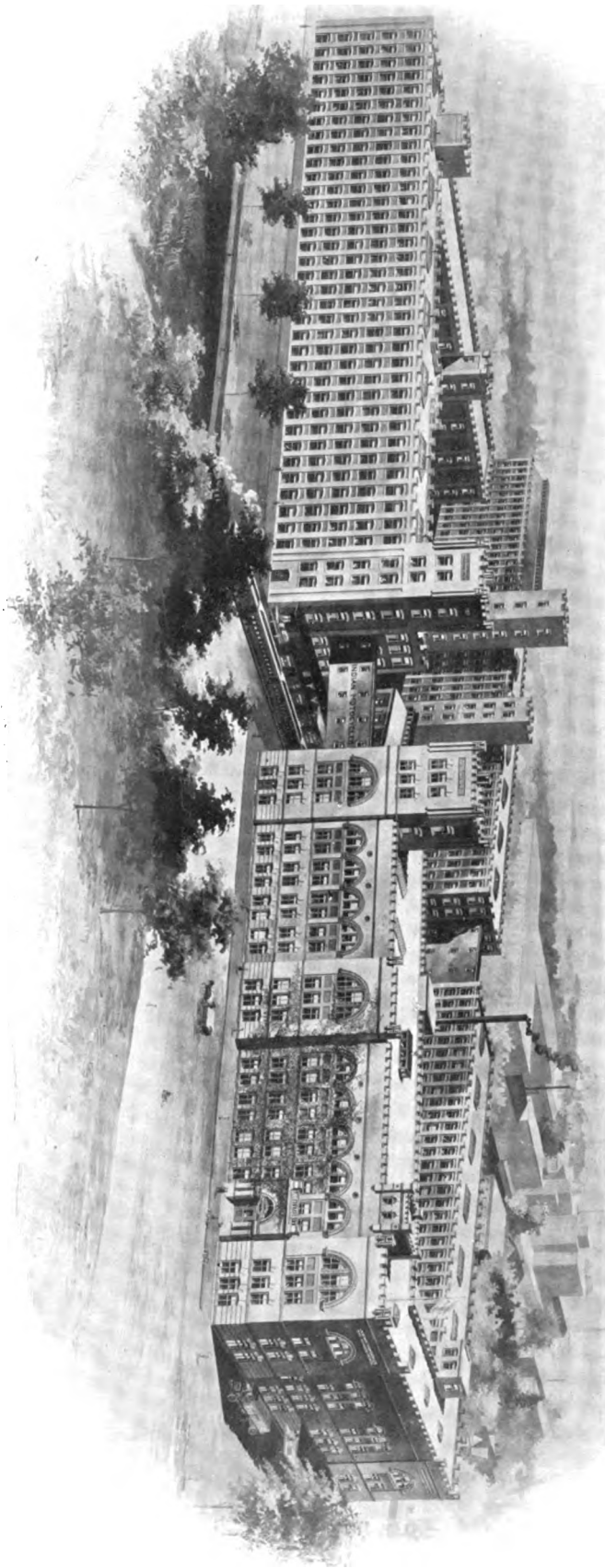
Saddle—Improved Indian Mesinger allowing very low saddle position. Option No. 4 or No. 5 Cavalry.

Finish—Indian red, all bright parts nicked over heavy coat of copper.

Tool Box—Large leather tool box attached to rear of luggage carrier containing complete set of tools, and repair outfit.

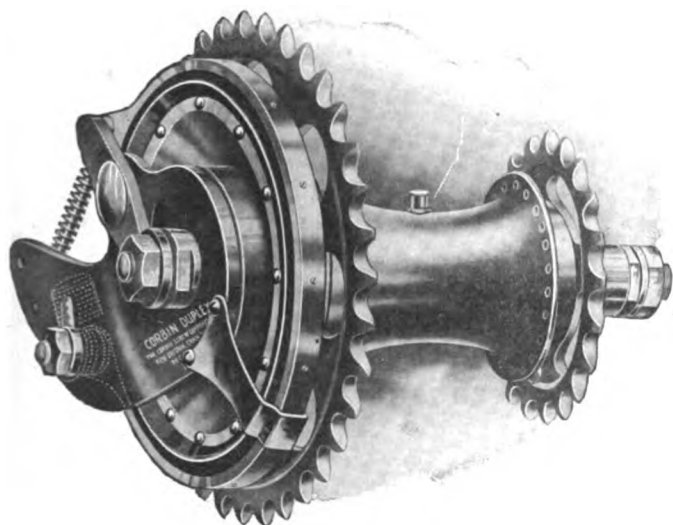
Luggage Carrier—Heavily constructed. Neat in design. Finished to match frame.

Foot Boards—Hinged construction to permit folding up.



THE WORLD'S GREATEST MOTORCYCLE WORKS
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MAKERS OF THE INDIAN MOTORCYCLE
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MOTORCYCLISTS: To insure CONTROL and avoid accidents—insist that your machine be equipped with the



CORBIN Motorcycle Band Brake

¶ The 1913 model of this famous braking device—the original motorcycle brake—is the simplest, strongest and most reliable brake any motorcycle can require, however powerful. Adaptable to all makes.

¶ An improvement for 1913 is the nut lock formed by two projections on one end of the band. Prevents the nut turning or jarring loose. A further improvement is a bracket attached to the lower side of the brake arm. Keeps the band from dragging on the drum or sagging when expanded. Also prevents loss of power or overheating.

¶ Be on the safe side. About 50% of all motorcycles made today are Corbin equipped. Insist on the Corbin Band Brake for *your* motorcycle.

Write for new 1913 catalogue showing all Corbin brakes and hubs for bicycles and motorcycles.

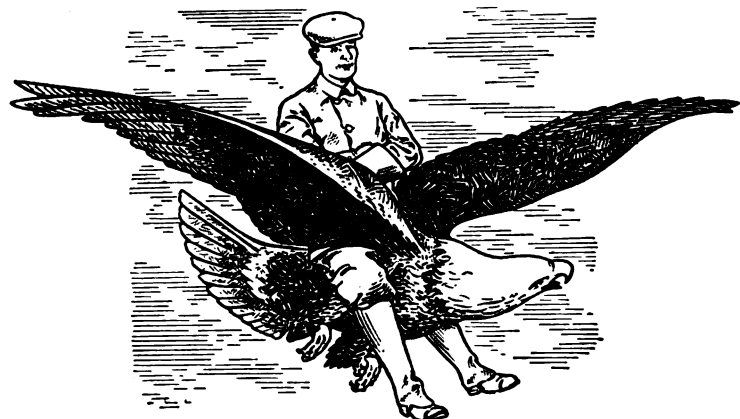
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Don't forget that cylinder capacity is the basis of power, and the efficiency of the cylinder capacity depends on clearance space over the piston, ports, cam action, carbureter and inlet pipe capacity, lightness of reciprocating parts, fit of piston and rings, lack of internal friction, its capacity to eat, digest and get rid of gas.

The Eagle just bristles with these points. The whole combination of size and high efficiency produces a motor that is able to twist the rear wheel so fast that the trees, side of the road, look like a

high fence, and say, you simply can't let the throttle stay open. She's too high spirited for that kind of running. And too, Bosch, Eclipse, Mesinger, Standard Welding and others of the high class accessory manufacturers help to make the Eagle.

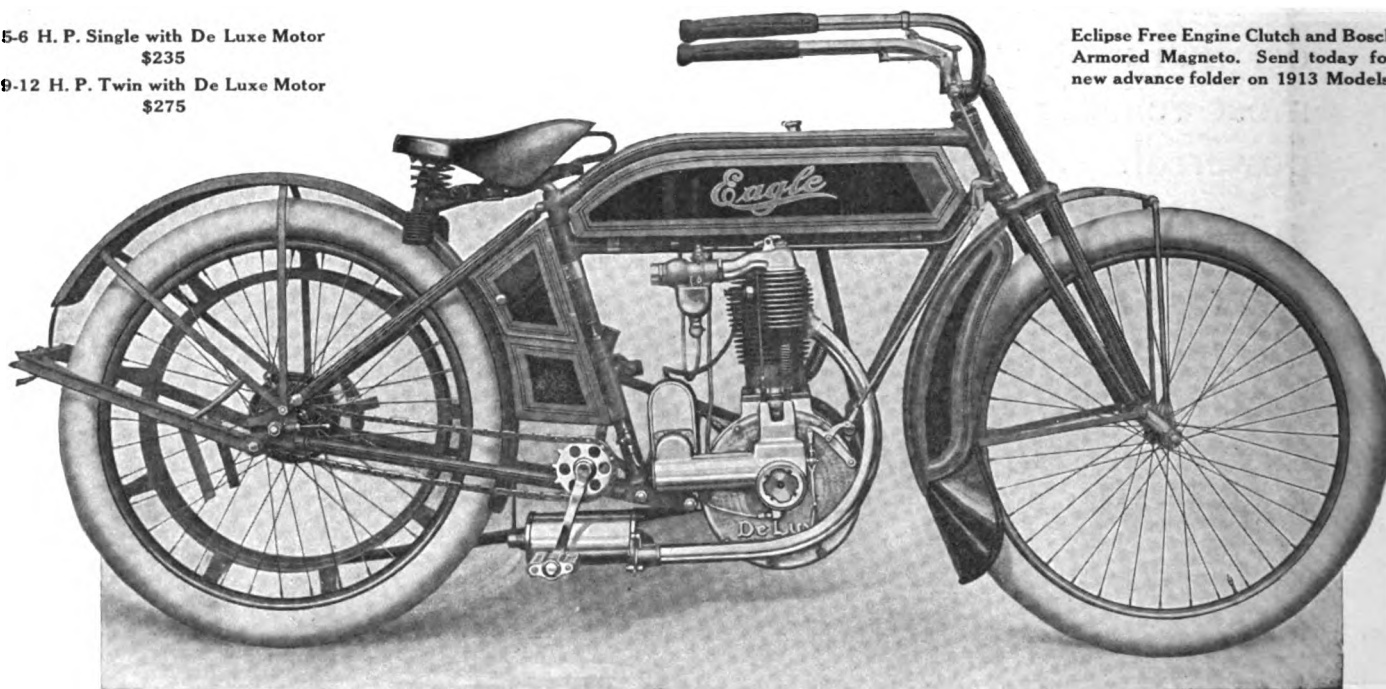
Show the Eagle to a buyer. Just show it. Don't say a word. Let the Eagle do the talking. You'll be surprised how convincing that dumb show will be. The Eagle speaks for itself.

Get the agency and see.

5-6 H. P. Single with De Luxe Motor
\$235

9-12 H. P. Twin with De Luxe Motor
\$275

Eclipse Free Engine Clutch and Bosch
Armored Magneto. Send today for
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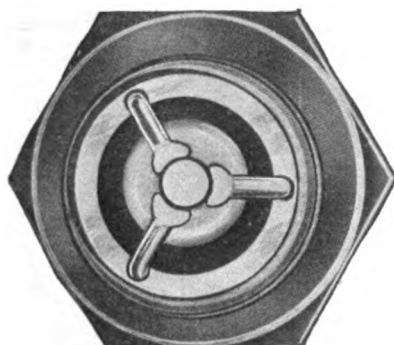
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**As good as
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Enlarged view of the Bosch Plug



An end view, showing the three
crescent-shaped electrodes

THE Bosch Motorcycle Spark Plugs differ in every respect from other motorcycle plugs that you have used. They are free from the usual imperfections of design and material; though neat in appearance, their very substantial construction makes for a spark plug which not only withstands the trying conditions of motorcycling but at all times gives maximum results with minimum attention.

The Bosch Plug is absolutely gas-tight; there are no threaded nuts used in its construction. The insulating material is Steatite, an indestructible artificial stone with positive and exceptional insulating properties. Steatite is neither brittle nor subject to deterioration from intense heat or excessive use of oil.

Do not accept moderate power results—maximum efficiency can be obtained at all times by using Bosch Plugs; they complete the perfect ignition system—

**The Bosch Magneto
with Bosch Plugs, of course**

Write for literature and booklet, "Locating the Spark Plug"

BOSCH MAGNETO COMPANY
223-225 West 46th Street, New York City



Before Mr. and Mrs. Gale started on their eventful transcontinental trip they debated long and earnestly on what tires to use. After drawing upon his years of experience as a motorcycle rider, Mr. Gale emphatically voted in favor of

CONTINENTAL-ERIE TIRES

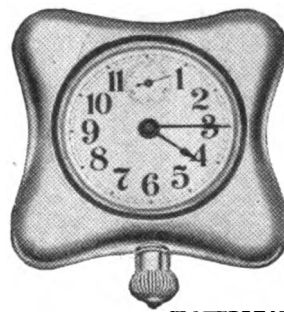
That their choice was a wise one has been proven by the triumphant completion of their journey through every imaginable road and weather condition, all of which Continental-Erie Tires went through "with flying colors."

Dealers—Get our 1913 proposition.

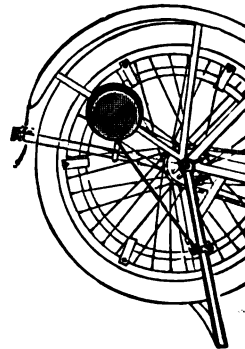
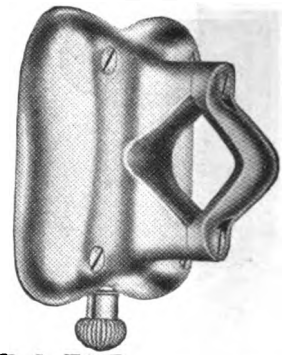
Continental Rubber Works
Erie, Pa.



Motorcycle Supplies



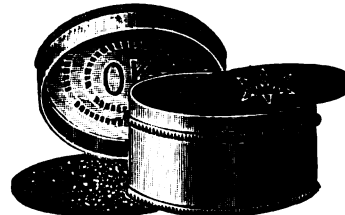
GLOVERLEAF M. C. CLOCK
movement is standard and guaranteed. Case is solid brass casting, nickel plated. List, Each \$3.50.



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avoids necessity of dismounting after machine is started on stand. Simply give machine forward push and lift raises stand to proper position in guard clip.
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should be used on all exposed engines where water is likely to come in contact with plug and cause short circuit.
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"O" PATCH ASSORTMENT
contains 10 Ready-to-Use Patches, which require no cement. Patches are 1 1/2 inch—just right for punctures. Contained in air tight brass box moisture and rust proof.
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Handsome lithographed sifter top metal can, with friction bottom, which can be opened when empty for refilling. Measures 1 1/2 by 5 inches. Best quality talk. Highest grade package for purpose ever put out.
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EAST INDIAN MICA PLUG,
made of best East India mica. Lateral winding instead of mica washers. Best motorcycle plug made.
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5 INCH MOTORCYCLE FLIER.
High Grade. Finely nickel plated.
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Order through your dealer. Positively no correspondence or orders handled in any other way. Dealers, ask for 500 page catalog of motor and cycle material. Most complete line ever shown.

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THE BAXTER SIDE-CAR

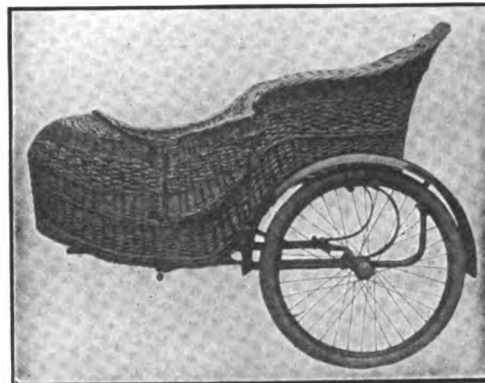
Ten years of side-car manufacturing experience has qualified us to state authoritatively that the Baxter side-car is fit to cope with any and all road conditions in America.

Its chassis of seamless steel tubing, double truss frame construction and rigid mud-guard give it enormous stability.

Yet so scientifically is the weight distributed that it is the lightest frame on the market. Then, too, the hub spindles, the most vulnerable points on a side-car, are turned from solid Bessemer steel.

Comfort is assured by its tension spring absolutely absorbing all shocks, its deeply upholstered basket of India rattan and its popular English shape.

NOTE.—We make baskets to specifications. All parts quick-detachable and furnished separately if desired.



**Model
No. 2**

**With Side Entrance
\$65**

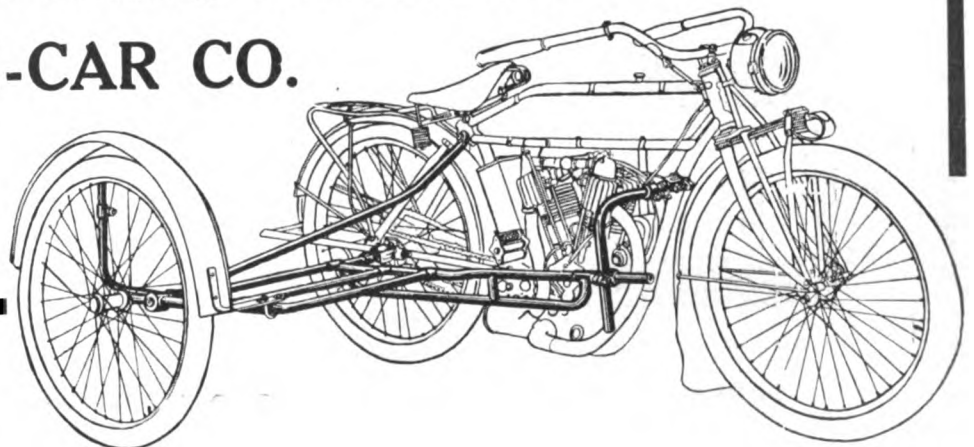
**The Strongest, the Lightest, the most
Comfortable Side-Car in the world.**

Note the simple yet tremendously powerful frame. There are but three points to be attached. This is done by means of quick detachable clips in the space of five minutes.

Write for our catalog. Immediate deliveries

BAXTER SIDE-CAR CO.

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Cambridge, Mass.**



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ECONOMY

In buying a motorcycle, economy of upkeep should be taken into serious consideration. Repairs and replacements are costly and often result in an ultimate expense that may be far greater than anticipated.

That transmission has an important bearing on the expenses of upkeep is a well-known fact.

Our contention is that the belt, especially the "Spartan" belt, is not only more economical than

other forms of transmission, but that it is the only logical and practical transmission for giving satisfactory service.

We will confine this talk to a comparison of the belt and chain from the standpoint of economy, emphasizing replacements and mileage. In the succeeding "G & K" Belt Talks, other points of comparison will be taken up.

Comparative Facts

Misalignments are common and frequent to all forms of transmission.

With a V-belt, for example, any slight misalignment does not cause appreciable wear nor loss of transmission efficiency. The belt, whether "V" or flat, wears and not the pulleys. The latter frequently outlasts three to five belts before affecting the efficiency of the drive. When a belt is unserviceable, a new one can be fitted and the transmission will be just as efficient as before.

With a chain transmission, on the other hand, a defective alignment means that the chain or sprockets or both will wear improperly and their life will thus be reduced. When a chain or its sprockets are worn, the remedy is renewal of both, otherwise the efficiency of the drive is materially reduced, for a new chain will not work well on worn sprockets nor will an old chain work well on new sprockets.

Belt transmission being flexible absorbs the road shocks and is thus easier on the power-plant and frame. A non-flexible drive transmits these shocks throughout the entire machine.

Shocks from quick starting and other overload causes result in putting the driving wheel out of round; this necessitates the expense of rebuilding it eventually. Keys are sheared, threads stripped and bearings (either ball, roller or bronze) are damaged by these shocks. The slip of the belt under abnormal conditions prevents these shocks and the results mentioned are comparatively rare, in the case of belt-driven machines.

An examination of the running gear of machines other than belt driven will show a majority of frames out of line due to the excessive strain of the harsher form of drive. It costs something to have a frame straightened, and it does not improve the running of the machine, as a frame once put out of line can rarely be gotten back again perfectly. When the frame is out of line the wear of tires, bearings and transmission will be uneven.

It will be seen from the facts enumerated that by reason of the reduced number of costly replacement charges and the greater mileage under similar riding conditions, the belt is the most economical in comparison with other forms of transmission.

Spartan Belts

are foremost in mileage and efficiency. That's why 80% of the manufacturers of belt drive motorcycles use them.

A Word to Dealers

Honest and business-building dealers sell a customer not always what he thinks he wants, but what he needs—even though they may thus sacrifice a large immediate profit and a future harvest from repair bills. By honest service, dealers have secured the purchasers who will stick to them for years and bring other customers to them. If a customer needs a motorcycle for professional track work where excessive speed is demanded, he should be sold a chain-driven machine—if he requires a motorcycle for all-around pleasure and sport and little upkeep expense, then unquestionably he should be persuaded to buy a belt-driven machine.

We extend the right hand of fellowship to every honest dealer.

The Graton & Knight Mfg. Co.

Worcester, Mass.

Branches in Principal Cities

Canadian Distributors, CANADA CYCLE AND MOTOR COMPANY, West Toronto - Winnipeg - Vancouver

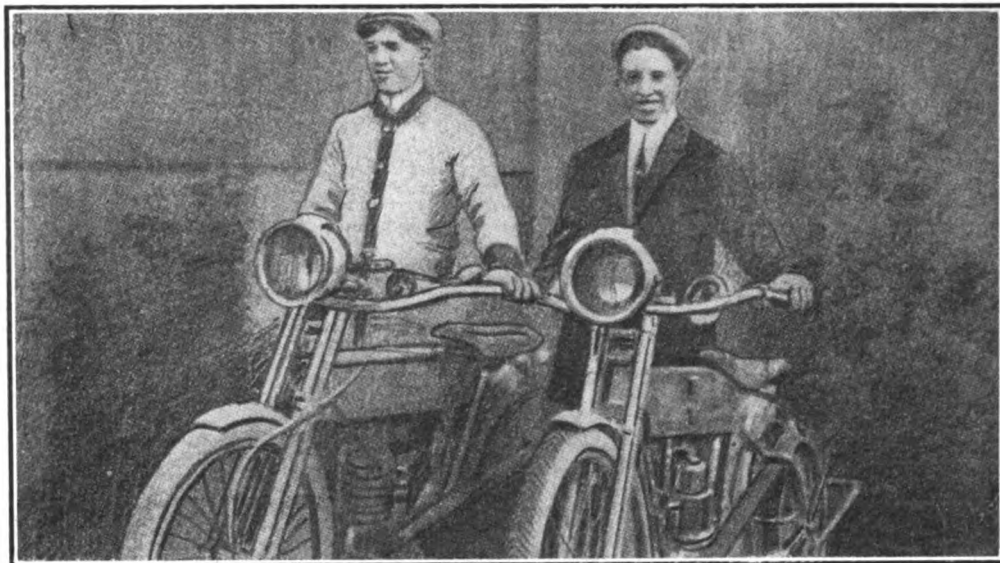
Canadian Dunlop Trophy Contest Another Big Harley-Davidson Victory

997¹/₂
vs.
572



STEVE LICENCE AND ARTHUR OTTLEY, PENALIZED ONLY FOR BEING AHEAD OF SCHEDULE.

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CHAS. RUSSELL AND FRANK RYNEX AND THEIR PERFECT SCORE HARLEY-DAVIDSONS.

FOUR Harley-Davidsons started—all finished—two with perfect scores; the other two were penalized for checking *ahead of schedule*. Twenty other machines started, representing seven different makes. The only perfect score in these twenty was made by a make with six entries, two more entries than the Harley-Davidson had. But the *average* score of these six machines was only $468\frac{5}{8}$ —less than half that of the Harley-Davidson. The grand average of the other seven makes was 572, compared to the Harley-Davidson average of $997\frac{1}{2}$.

Nineteen of the twenty competing riders were unable to equal even the *lowest* Harley-Davidson score. Seven of these had not finished at the time the checking station was officially closed in Toronto at 6:50 P. M.

That the Harley-Davidson motorcycle is dependable under any and all conditions is an acknowledged fact. That it is without an equal at any price is now general knowledge. Overwhelming Harley-Davidson victories like the Canadian Trophy Contest, embracing as it did *the very cream* of the world's *best* makes, have come to be the general order of things and are no longer looked upon as exceptional or phenomenal performances to stir up the entire industry.

Of course, the Harley-Davidson costs more. The best motorcycle designers and engineers in the business are responsible for the Harley-Davidson and good material and skilled labor cannot be had at the same prices as ordinary material and indifferent or inefficient work.

HARLEY-DAVIDSON MOTOR CO.

296 C Street

Milwaukee, Wis.

Producers of High Grade Motorcycles for Eleven Years

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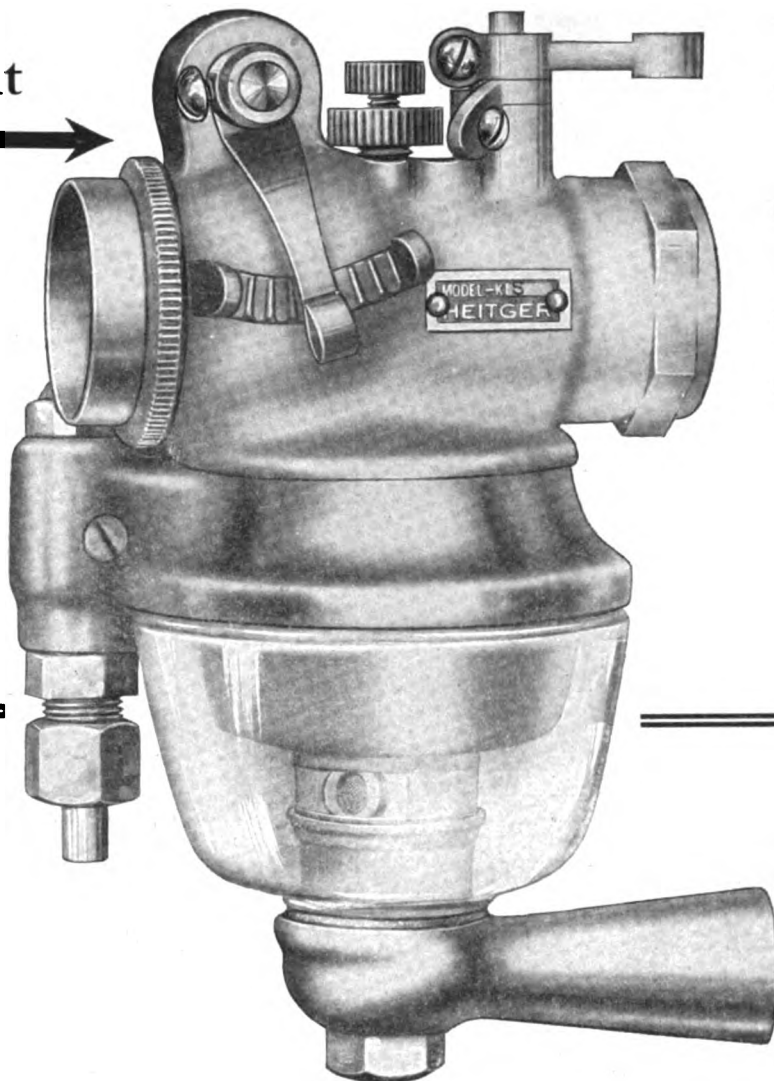
**Air Adjustment
at all
Speeds**



**This means
more power
and Speed**

**Actual size of the
New Model K**

**"Special"
Heitger**



**Here is the New Model K "Special" Heitger that
runs all motors like a "Special" Carbureter should**

The adjustment of the "Special" Heitger is so simple that any novice can get high efficiency. Adjust the flow of gasoline for low speed, the high takes care of itself—simply has to. Then for that last word in Carbureter adjustment, you can touch up the mixture until it is just right by moving the Air Adjusting arm

just a notch either way. It gives your Motor that sharp, snappy purr of the Racing Motor and all the Speed too.

Only two adjustments, the gasoline and air flow, and after these are set they are both automatic.

Send to-day for Catalog, or, better still, order the Heitger "Special" for your machine.

HEITGER CARBURETER COMPANY

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The Emblem for 1913

is an astonishing combination of

Strength - Speed - Comfort
Durability - Satisfaction

EXPERIENCE TEACHES

During all of these years we have been improving. We have spared no effort to make the Famous EMBLEM of 1908-09-10-11 and succeeding Models better each year, more Speedy, more Serviceable, more Comfortable, more Beautiful. The Sturdy old EMBLEMS of former years are still running, still satisfactory

"Once an Emblem rider always an Emblem rider"

MODELS

Single	Battery or Magneto	Belt Drive
Twin 7	Magneto	Chain Drive
10 H. P.	Magneto	Chain Drive

The addition of a 10 h. model to the Emblem line means that the demand for an exceptionally powerful machine is adequately met. One man who tried out the Big Ten Emblem said: "That machine could climb a telegraph pole!" An exaggeration, but it shows what enormous power the new Emblem has.

SATISFACTION FOR RIDERS MEANS PROFITS FOR DEALERS.
BETTER WIRE FOR YOUR TERRITORY—IT'S GOING FAST.

EMBLEM MANUFACTURING CO., ANGOLA, N. Y.

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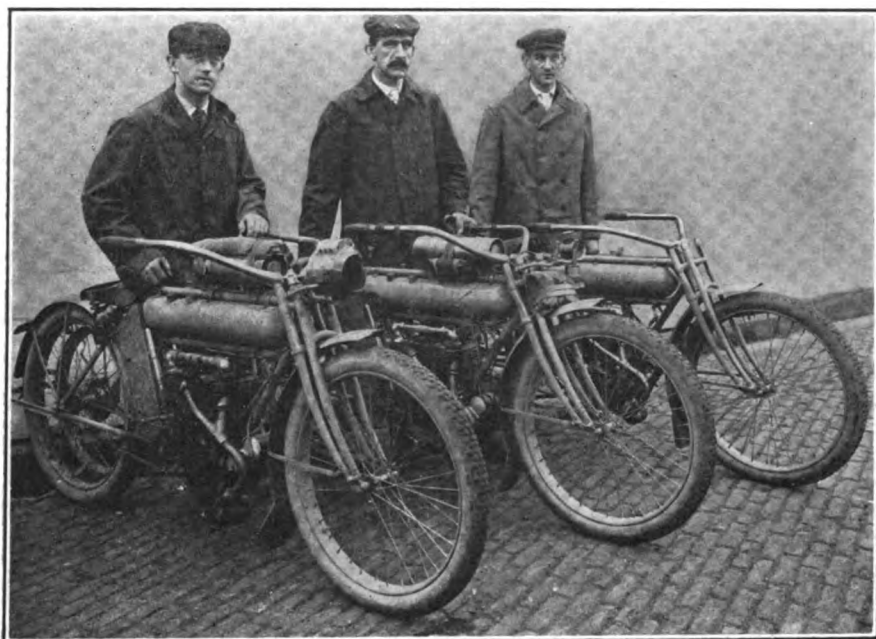
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The Yale Motorcycle is the



ORTIE STEVENS, P. W. Stevens and George Riechey, the Yale riders, won the New Jersey Motorcycle Club's 24-hour endurance run, 325 miles, September 14-15. They won "hands down"—the only team with a perfect score. Besides the big team trophy, a gold medal went to P. W. Stevens, and a silver cup to Riechey as special prizes for the most consistent riding of any of the 28 competitors.

DURING the 1912 season there were just three endurance contests of national scope, in which representative fields were entered with teams of all the big manufacturers riding. These were: the Middletown Club's three-day run from Middletown, O., to Louisville,

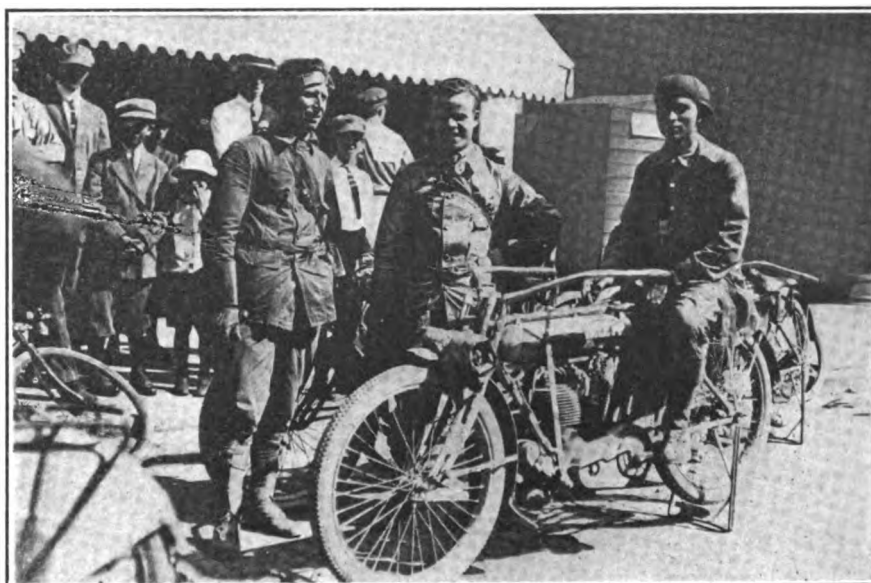
Ky., and return, 400 miles, August 31, September 1, 2; the 24-hour endurance grind of the New Jersey Motorcycle Club, over 325 miles of hills, sand and mud, September 14-15; and the three-day contest of the Ohio State F. A. M., Toledo to Cincinnati over a circuitous course of 573 miles, October 11, 12, 13.

In each of these the Yale won decisively, with its team the *only* one to come through to the finish with all its riders still in the running. In every case the three Yale riders were going as steadily at the finish as at the start, and on time to the dot. In each case the Yale won decisively—there was no chance for another machine to claim a "best showing" even by juggling figures or making

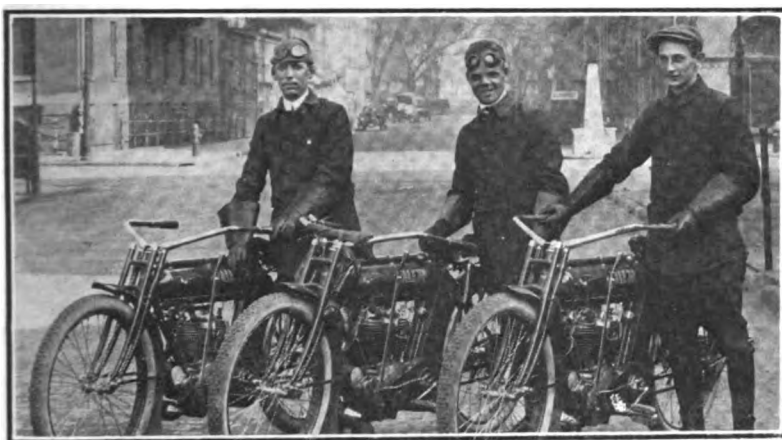
National Road Champion

excuses. The Yale succeeded where the others simply could not "deliver the goods" and the score sheets told the story.

The best machine for road riding is the one the average rider wants. He wants to be able to "give the dust" to the other



THE Tri-State endurance run of the Middletown Motorcycle Club (Middletown, O., to Louisville, Ky., and return, August 31, September 1 and 2) was another decisive Yale victory. Squier, Meyer and Campbell, the Yale team, were the only team to bring all riders through with perfect scores. The machines ran steadily as clockwork, unaffected by the terrific heat, bad roads and mechanical troubles that put so many others out of the running. Campbell's left hand was put out of commission by a fall caused by hitting a dog, but his never-failing Yale carried him to victory steered by one hand.



THE three-day endurance contest of the Ohio F. A. M. (Toledo to Cincinnati, 600 miles, Oct. 11, 12, 13) is still fresh in the minds of all riders. It was another decisive Yale victory, for while no other team had more than one rider finish—with any kind of score—all three Yale men were in on time at Cincinnati. Squier and Jacobs had perfect scores, and Campbell had 996, delay by a Cleveland traffic policeman having cost four points.

fellow, and with a Yale he can always lead on the road.

The Yale is the fastest road machine made, bar none, for all conditions; for the motor not only possesses superior power and more "pepper," but the balance and steering qualities are so perfect that the machine can be handled at speed where any other is unmanageable.

*Write us about the Yale agency in your territory.
We are ready to "talk turkey" regarding 1913 Yale agencies. Get busy.*

THE CONSOLIDATED MANUFACTURING COMPANY

MEMBER M. M. A.

1730 Fernwood Avenue

Toledo, Ohio

F. C. Cornish, Eastern Representative, 219 Clinton Ave., Newark, N. J.



Some Refinements Made in the 1913 R-S

CLUTCH ON CHAIN MODELS—Cork inserts have been added to Cone Clutch, which give 50% more pulling power and make it fool-proof.

VALVE MECHANISM—Intake and exhaust cams are integral with timing gear, constructed of one-piece vanadium steel, undercut for long bearings. This assures accurate timing. We were the first to adopt this feature in 1912 and hold patents covering same. We are the leaders, others are following.

ECLIPSE CLUTCH ON BELT MODELS—Corbin Eclipse or New Departure Coaster Brake—Bosch Magneto—Troxel Saddle—Schebler Carbureter.

MODELS

Twin, Chain Drive	-	-	-	\$275
Tourist, Belt or Chain	-	-	-	225
Service, Belt Drive Only	-	-	-	200

THE COMMON RESULT OF STANDARDIZATION

The R-S is the only machine on the market that has not undergone a noticeable change in design for 1913. Why? Because, secure in its established station as "The Finest Motorcycle in the World," it needs no bolstering with so-called "improvements" to hold its enviable position.

DEALERS—THINK THIS OVER

Reading-Standard Co.

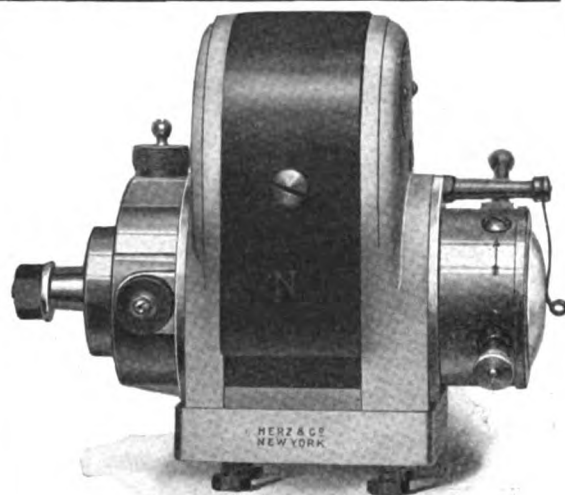
306-340 Water Street, Reading, Pa.

For a Fat, Hot Spark-

a spark that you can count on even at very low speed - the kind of spark that spells the finish of jumpy, irregular ignition - equip your machine with

HERZ MAGNETO

It gives a great big flash at every turn - Tested against 15 competitors on the official English testing machine, it was adjudged the strongest Magneto by 25 %.



HERZ MAGNETO is small and light. It is not affected by atmospheric conditions and is protected absolutely against dust and moisture.

For easy starting with retarded spark, no other Magneto can compare with it.

Use Herz Plugs with Herz Magneto.
The combination is the ideal ignition system.

HERZ & CO.
295 Lafayette St., New York.

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CLARK MOTORCYCLE STARTER

A neat and compact attachment for the carburetor, that starts the engine without excessive pedaling, reduces carburetor trouble fifty per cent and cuts down the gasoline bill. A gasoline engine requires a richer mixture to start on than is needed after it is warmed up. Without the Clark Starter, it is necessary to open the needle valve more than is required to give efficient results after engine is warmed up.

Price 75c.

W. F. Clark Mfg. Co.

3551 W. 23rd St.
Chicago, Ill.



To start engine, turn starter handle to right, which shuts off the auxiliary air, crank engine once and engine will start instantly. As soon as the engine warms up, turn starter handle to original position, which re-opens auxiliary air; if desired to give a richer mixture, without stopping to adjust carburetor, turn starter handle to right until desired mixture is obtained.

NO MORE OF THIS

37

STARTS YOUR MOTOR *IMMEDIATELY*

WHY DeLuxe MOTORCYCLE MOTORS EXCEL

BECAUSE OF THEIR

Oil Tight Qualities

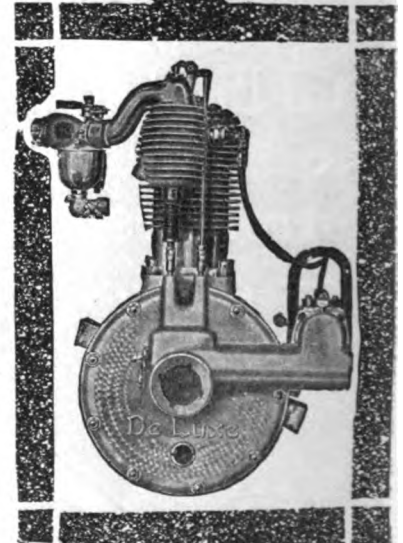
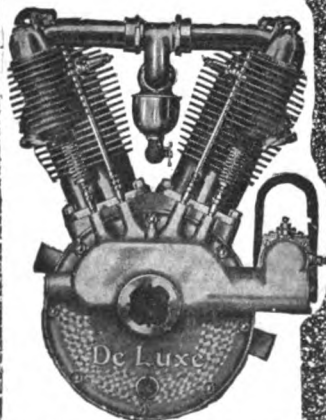
DeLuxe motors are entirely free from oil leakage due to the one piece crank case and cover construction wherein extra joints are done away with. No other motor is as clean as ours on the road.

Watch this space for more details of DeLuxe Motors.

FOUR SIZES

4 H.P. Single Cyl.
7 H.P. Twin Cyl.

5 H.P. Single Cyl.
9 H.P. Twin Special



Motor Data
No. 4

THE F.W. SPACKE MACHINE CO

INDIANAPOLIS, IND., U.S.A.

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Fits
Every
Motorcycle

Increase Power

Speedo

IT'S GUARANTEED

YOU will never know how perfectly your Motorcycle can run until you try SPEEDO.

It is as essential as the carbureter. Thousands already in use. Attached in five minutes on intake manifold. Breaks up and remixes each particle of gas with sprays of new air, cutting crosswise through the mixture. Automatically gives just the proper additional air your running speeds require. Passes you by the other fellow. Pulls you through sand and mud. Sails you over the hills. Small enough to be out of the way. Big enough to work wonders.



"It's the SPRAY That Does It."

Absolutely Guaranteed

1. To Increase Power 20%
2. To Save 20% Gasoline
3. To Remedy Carbonization
4. To Keep Engine Cooler

Price \$2.00 Including Decarbonizer

Your money is refunded if you are not pleased.
No dealer is authorized to sell otherwise.

See any Dealer,
or Write

REMIND YOURSELF TO ORDER TODAY

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If my dealer hasn't Motorcycle SPEEDO, I will state whether for single or twin. Amount, \$2.00 prepaid.
 Refunded if I am not pleased.
 Fulton-McGutchan Co.
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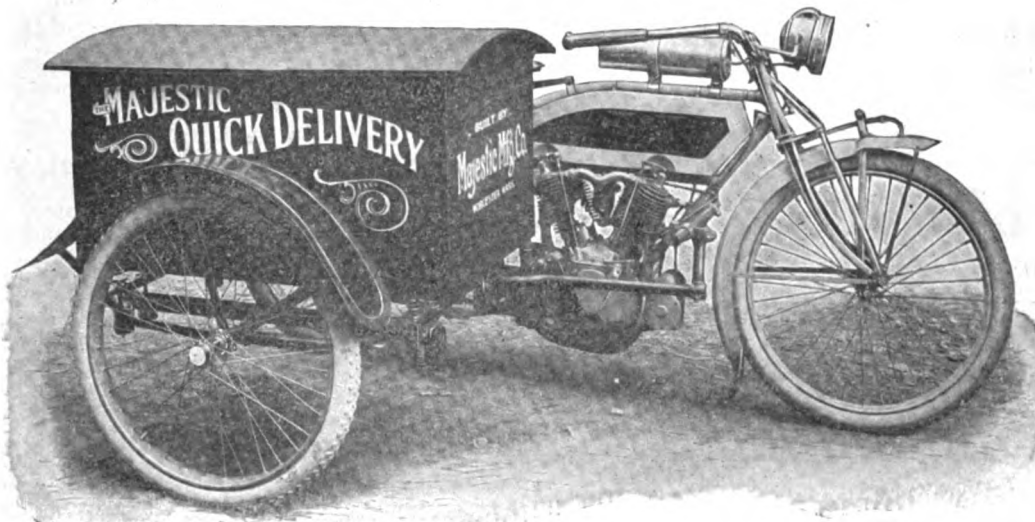
T E A R T H I S O U T

MAJESTIC COMPOUND-SPRING DELIVERY VAN

The Ideal Motorcycle Commercial Vehicle

Maple Veneer
Body

Seamless
Steel Tubing
and
Channel Steel
Chassis



Guaranteed to
Carry 300
Pounds

Small Vibration
Great
Strength

Backed by Experience.

Proven by Tests.

ALSO PASSENGER MODELS

SEND FOR 1913 CATALOGUE

MAJESTIC MANUFACTURING CO. Worcester, Mass., U.S.A.

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How Far Can You See at Night?

Do you slowly creep along—seeing a few feet ahead of you, by means of a feeble oil lamp or small carbide generator—or do you ride along at a good speed with a flood of Prest-O-Lite brilliancy telling you of coming ruts and puddles IN PLENTY OF TIME to avoid them?

The pleasure of night riding is made possible **ONLY** by Prest-O-Lite—the practical light for motorcycles.

Turn on just like a gas jet and touch a match. Convenient, clean, dependable. Nothing to freeze in cold weather.

Gives you a steady flood of bright light that neither flares up nor dies down. Insures yourself and your mount against accidents. It is, in every way, the only economical kind of light.

Prest-O-Lite Owners



"Presto—Best by Test," says S. Karl Hovland, of Bowbells, North Dakota, who uses Prest-O-Lite on his "Yale 7."

Prest-O-Lite Motorcycle Gas Tank

Exchange service practically everywhere has been provided for you through our 20,000 dealers (automobile and motorcycle).

NOT AT ALL Expensive

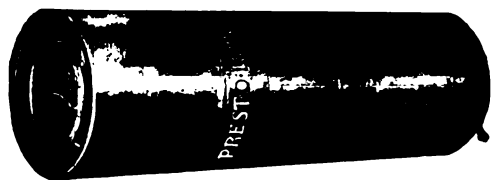
Any rider who has used Prest-O-Lite will tell you that the operating expense of it is no greater than the cost of the carbide a generator consumes.

The first cost of the tank, \$10, does not represent money spent, but **INVESTED**, because the genuine Prest-O-Lite Tank is always in demand and is always saleable for about its first cost.

Therefore you can easily afford it—in fact you cannot afford to be without this combined Convenience, Pleasure and Insurance. One accident due to poor light may cost you more than years of Prest-O-Lite service.

Price of Tank \$10

(Equipped with gauge.)



Dimensions: Length, 13¼ inches; diameter, 4 inches; weight, 8¾ pounds.

Don't Let Anyone Cheat You With An Imitation

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one, ANYWHERE and ALWAYS. Imitations cannot.

The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

The Prest-O-Lite Company 246 East South St.
INDIANAPOLIS, IND.

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

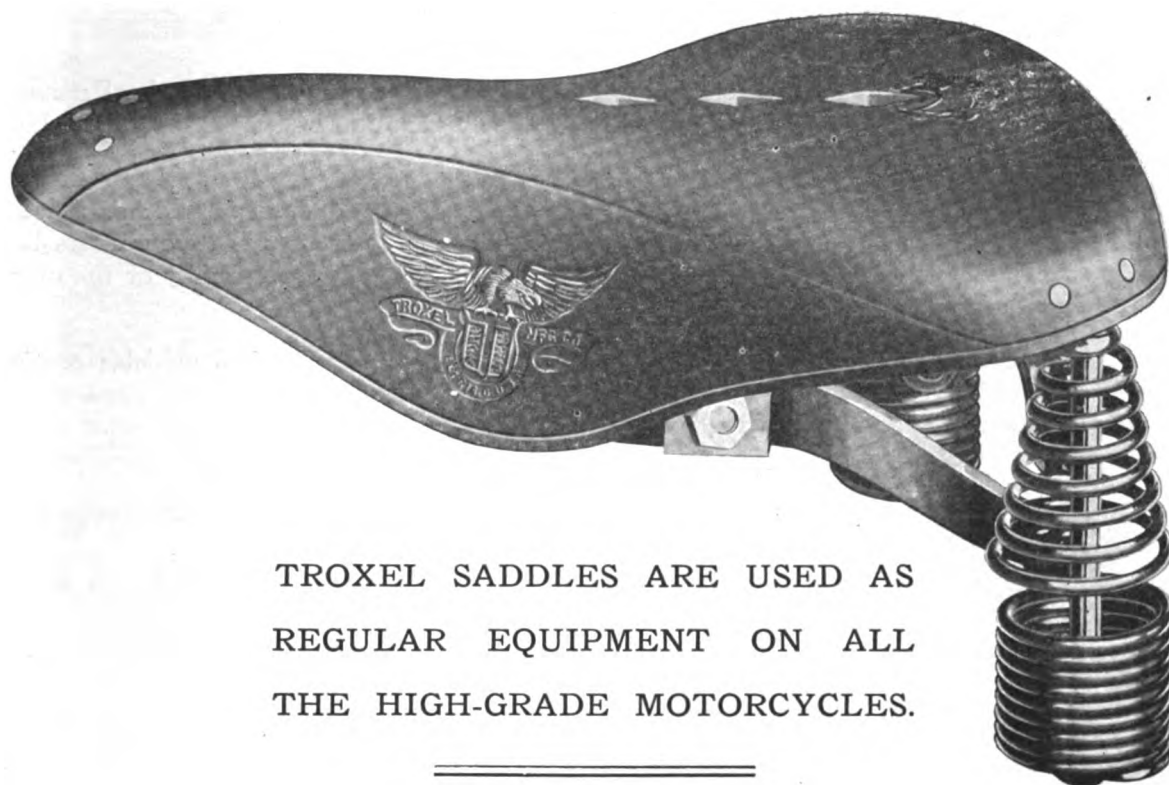
Mr. Dealer: Get into the habit of talking to your customer about Prest-O-Lite. A simple statement of the facts about this light will make sales.

And, if you want to retain your customer's trade on other things, don't get him into the habit of going elsewhere for his Prest-O-Lite exchange.

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

Troxel "No Bump" Saddle

NEVER HAS HIT BOTTOM AND NEVER WILL



TROXEL SADDLES ARE USED AS
REGULAR EQUIPMENT ON ALL
THE HIGH-GRADE MOTORCYCLES.

TEN MOTORCYCLE MANUFACTURERS will use the Troxel Saddle exclusively for 1913, and it is regular equipment on every motorcycle built almost. Over 75% of all the Saddles used are Troxel Saddles. Think what this means. Every rider wants a Troxel. So Be Sure to

"Specify the 'No Bump' Troxel"

THERE IS A DIFFERENCE

TROXEL MFG. CO.

Elyria, Ohio

H. T. ROBERTS, Selling Agent

538 S. Dearborn St., Chicago, Ill.

The New "Big 4" Model K \$200 **POPE** The Popular Model H \$165

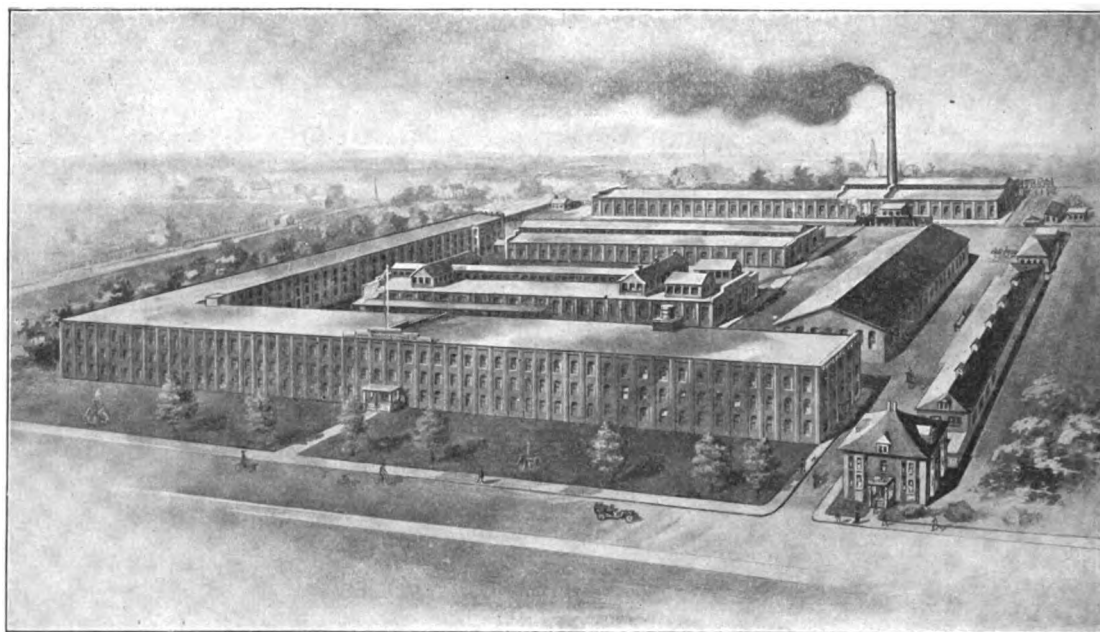
YOU CAN SELL EVERY PROSPECT.

We have the Product, the Plant, the Organization, the Experience, and the Resources to co-operate with our dealers in every possible way. Our output for 1913 will be large enough to give every dealer a profitable share of the business. You can sell every prospect.

Why not look ahead a little before making your arrangements for another season? Take a broad view of the situation in making a decision and remember that your interests as a motorcycle dealer depend quite as much on the resources and responsibility of the manufacturer as they do on the success of his product.

After being engaged in the manufacture of high-grade mechanical vehicles continuously for over 35 years, we are in a position to know our capabilities and capacity for service. The scope and facilities of our great works at Westfield, Mass., where Pope Motorcycles are made, guarantee our ability to co-operate with dealers in every possible way.

Write Today for Particulars of the Pope Line and Special Dealers' Proposition.



Pope Plant Where Pope Motorcycles Are Made.

The Pope Manufacturing Co., Hartford, Conn.

PACIFIC COAST DISTRIBUTORS

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KIMBALL-UPSON CO.

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VOL. 7

MOTORCYCLE ILLUSTRATED

NO. 22

OCTOBER 31, 1912

MORE SHOW SPACE NEEDED IN CHICAGO

Original Contract Was For 13,000 Square Feet But This Section Has Now Been Increased to 17,900 Square Feet, and Applications Are on File Covering the Entire Area.

MANAGER J. S. VOGEL, of the independent Chicago motorcycle show, announces that it has been necessary to contract for 4,900 square feet of extra space in order to accommodate the exhibitors who have already entered applications, and the total area of the show space will now be about 18,000 square feet. The original contract was for 13,000 square feet, but it was soon realized that this would fall far short of meeting the requirements, and at the meeting of the Motorcycle Manufacturers' Association in Chicago on October 9 negotiations were opened for more room in the show building.

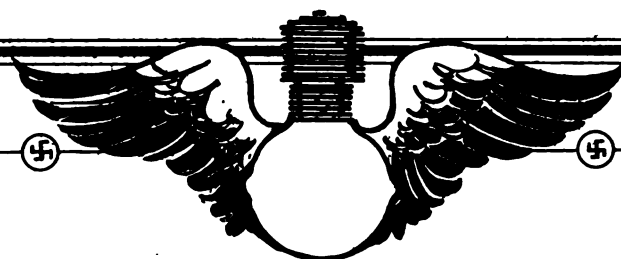
When it is known that the last motorcycle show in Chicago occupied only 3,500 square feet of floor space, a fair idea will be gained of the scale on which the present plans are being developed.

For a short time it was rumored that the members of the Motor and Accessory Manufacturers' Association would be prohibited from exhibiting because of a by-law which stipulates that members of the body are forbidden to exhibit at a show not sanctioned by the association, but assurances have been

received that the motorcycle show will be officially recognized. Statements to this effect have been given out by the Executive Committee, as well as by William M. Sweet, who is the show manager for the Accessory Manufacturers' Association.

Contract blanks for motorcycle exhibitors will be mailed as soon as the allotments have been made by the Show Committee, which will be early in November. Arrangements will be made whereby dealers from all parts of the country will be admitted without charge during the entire week. All that will be necessary is a signed order from the exhibitor they represent and on presentation of this order they will receive tickets entitling them to admission on each day. The M. M. A. Show Committee and Manager J. S. Vogel will be on hand at all times throughout the show week and every effort will be made to provide for the comfort of visitors.

Despite the fact that all the space contracted for by the show committee is now covered by the applications of exhibitors, Manager Vogel is anxious to hear from those not already represented, as steps may be taken to obtain an option on another addition to the show section.



INDIAN MODELS SHOW NEW SPRING FRAME

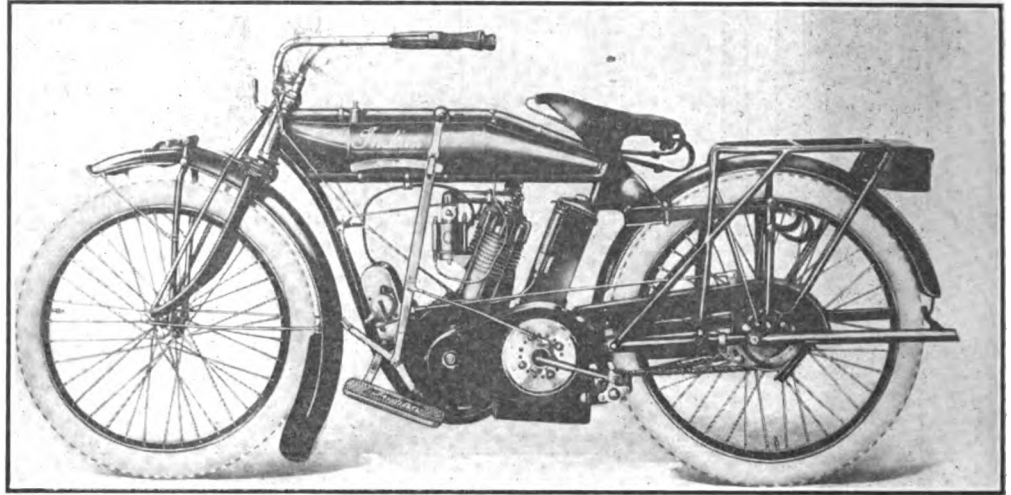
Distinctive Leaf-Spring System Features Rear Construction of Wigwam Products for 1913 and Other Improvements Are Numerous—Retinements in Motor, Larger Muffler with No Cut-Out, Guarded Transmission, Simple Braking, Wider Forks and Footboards on All Four Types.

TRIED products do not usually undergo marked changes from season to season, but an exception to this rule is the 1913 line of the Hendee Manufacturing Company, in which a radical departure from accepted motorcycle construction has been made; this is in the adoption of a spring frame in which vanadium steel coach or "cradle" springs are employed. As far as the use of this form of spring is concerned, the Hendee company is the pioneer, having had this spring type in its front fork for a number of seasons, but its application to a frame system is an altogether new arrangement for the wigwam designers.

Larger Tires.—Comfort and efficiency are further increased by the use of larger rims and tires, $2\frac{3}{4}$ -inch sizes of the latter being fitted to all but the 7-horsepower, two-speed models, which have 3-inch tires as standard equipment. Another feature, which appeals to all-weather riders in particular, is the increased clearance between the tires and mudguards, so that tire chains can be fitted without striking the guards or contiguous parts. The transmission is entirely guarded from mud and dirt, and as a result the rider will also keep clean. Footboards are fitted to all models, and riders will have a choice of position, with an assurance of safety in having the brakes instantly under control by merely a movement of the foot, regardless of whether the feet are on the pedals or footboards. The whole control system tends toward that used on automobiles, a combination of hand and foot.

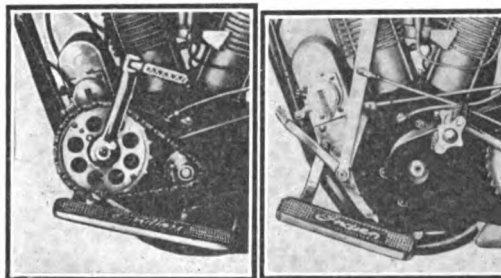
Refinements.—Other changes are in the line of refinement also. The foot-starter has a rubber-covered swinging foot-pin, which is out of the way until turned into position for use. The muffler is increased in capacity, and a luggage-carrier and accessibly-hung rear tool box are standard equipment. The big-end of the connecting rod is fitted with roller bearings and the transmission side bearing is increased in length. A Superba Mesinger saddle is supplied on all four models.

The Four Types.—Four models only will be manufactured for the 1913 season. These are the 4 h. regular model, priced at \$200; 7 h.



4 h. Model Without Two-Speed.

regular model, \$250; 4 h. two-speed model, \$275; and 7 h. two-speed model, \$325. The belt-drive 4 single is discontinued, as are also the Tourist Trophy machines. Only one color—Indian red—will be used, and United States tires only will be fitted.



Showing Clutch Lever on Two-Speed Model.

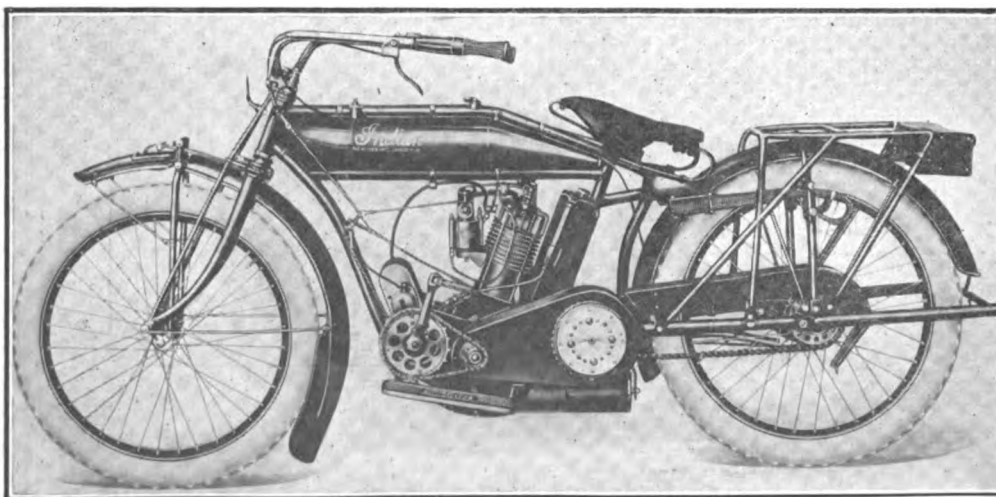
Showing Brake Lever as Fitted on Regular Model.

Motor.—For 1913 the Indian motor is unchanged in bore and stroke dimensions, but the bearing on the transmission side is made

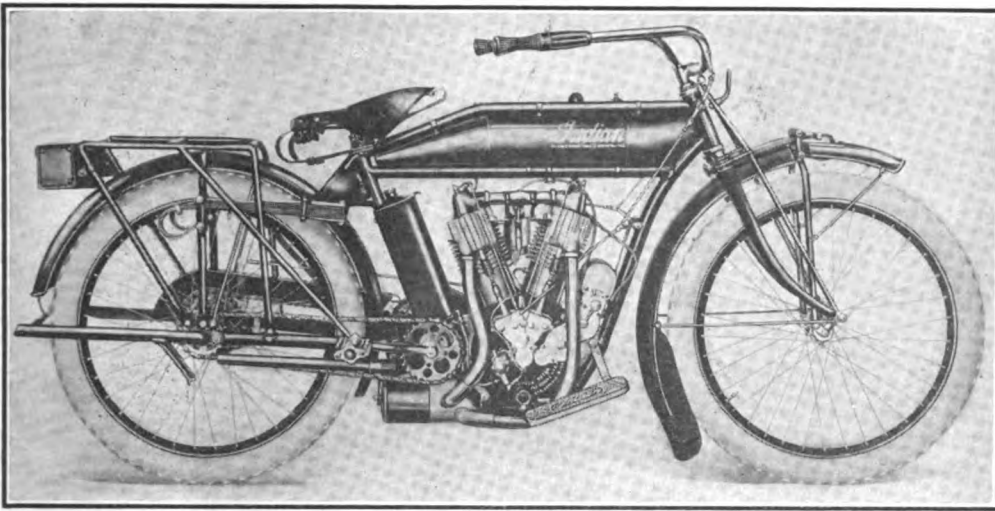
longer to accommodate the new chain line. This and the other main bearing are of bronze, as in previous construction, but the big-end of the connecting rod has a roller-bearing fitted, eleven cylindrical rollers being used. On the twin models the forked big-end has a reinforcing piece across the end, thus doing away with any possibility of the forks spreading or breaking. The employment of a roller-bearing at this point tends to reduce friction and guarantees longer life to both connecting-rod and crank-pin. The left side of the crankcase is slightly wider to accommodate the increased length of the transmission side bearing just mentioned. The flywheels are now drop-forged, and an even mass is secured, thus tending toward more efficient balance. The carbureter, valves and gearing, and ignition system are the same as on the 1912 product, having been found perfectly satisfactory. Lubrication is by mechanical pump as before, with the auxiliary hand pump fitted on the oil tank at the left side. New spark plugs, of Splitdorf make, are fitted on all models.

Muffler.—This fitment has been increased in length an inch and a half, and no cut-out is fitted. The increased volume makes the 1913 Indian unusually quiet-running, while the absence of the cut-out is in line with the gradually increasing disuse of that fixture and consistent with the policy of the F. A. M. The tail-pipe is also changed in form.

Transmission.—The familiar two-chain drive is, of course, continued on all models, but the chain line is now one-quarter of an inch further from the center line, to compensate for the increased clearance at the sides of the rear wheel. Both primary and secondary drives are guarded, the former by a fan-shaped casing with ports for the clutch body, and for the foot-starter sprocket on the two-speed models. The guard over the secondary drive is in the form of a right-angle piece with curved rear end which is attached to the rear fork and luggage-carrier stay, and fits over the upper side of the chain. The guarding thus thoroughly protects the transmis-



4 h. Single Type With T. T. Two-Speed.



7 h. Twin Without Two-Speed.

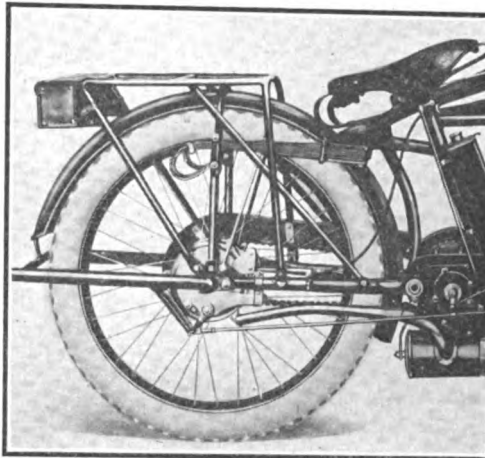
sion and at the same time keeps the rider clean. On the two-speed models a special steel stamping fastened to the crankcase side protects the ratchet portion of the foot-starter and strengthens it. The front sprocket of the primary drive is further protected by this same stamping, and runs within it.

Clutch and Two-Speed Gear.—On the regular models the clutch is operated by a hand-lever pivoting on a pin at the left side as in previous models, and the pinch collar as used in 1912 operates the plate mechanism. On the two-speed models, the clutch is operated by a through-rod with a rocker on the right side as in the Tourist Trophy two-speed machines, but to this rocker is attached a rod which in turn leads to a rocker on a second rod passing through the rear bearer plate of the motor. To the left side of this through-rod is fitted another rocker, and this is connected to a "heel-and-toe" pedal on the left footboard. When the rider presses down the toe pad, the clutch is disengaged, and when he presses the heel pad, the clutch is put into action again. The actual clutches on all models are the same as in 1912. The two-speed gear is suspended from a special "bottom bracket," forming the lower member of the rear frame, and the sliding dogs are operated as in former models. With the exception of a re-designing casing it is similar to that used during the 1912 season. The top of the gear casing has four bolts, whose heads fit in rectangular slots in the bottom bracket, permitting of fore and aft movement when it is necessary to adjust the primary chain distance. A plate fits over the top of the bracket when the machine is in service.

Brakes.—On the two-speed models the braking system is the same as on similar models of the previous season. An external contracting band, operated by a finger lever on the left handlebar, acts on a drum on the right side of the rear hub, while an internal expanding brake on the same drum is operated by a foot-pedal on the right footboard. On the regular models, the Corbin band brake is used, but there are two methods of actuation. The first is by back-pedaling, while the second is by means of an upright lever at the left side of the hub. This lever is connected to a foot-pedal mounted on the same pin as the clutch lever and easily accessible to the rider. No matter where the rider may have his foot, he can set the brake without loss of time by this arrangement. The rear hubs are all ball-bearing. The Bowden cylinder is now

mounted on the rear fork and acts horizontally.

Footboards.—These are fitted to all models, whether two-speed or regular. The upper faces, diamond-pointed and bearing the characteristic Indian mark, are of aluminum plate.



Rear Construction on Single Two-Speed Model, Showing Spring Frame and New Muffler Tail-Pipe.

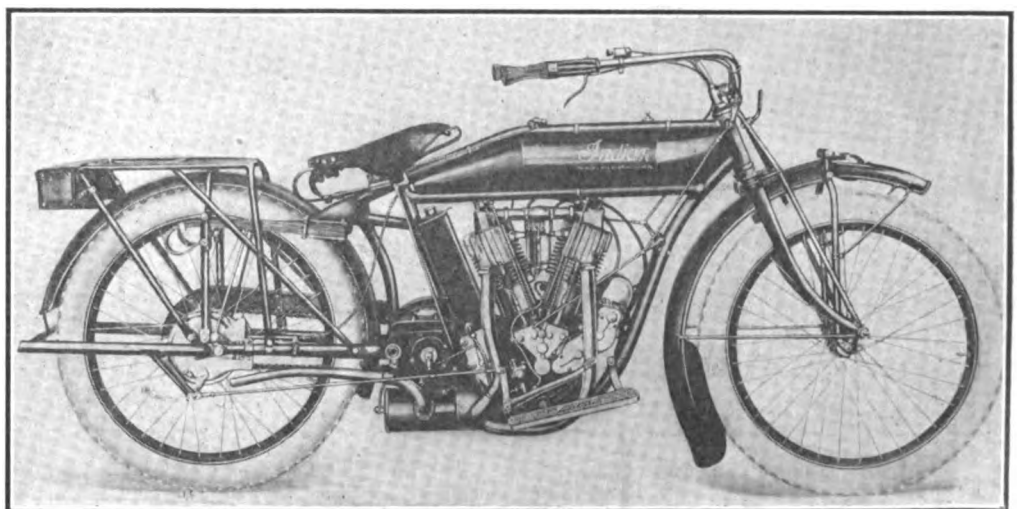
On the two-speed models the footboards are fitted directly below the motor and attached to the crankcase and bearer plates, while on the regular machines they are well forward, clear of the pedals and attached to the loop tube.

Frame.—Changes in the front portion of the frame are in the nature of refinements. The steering-head is larger and the races are equipped with $\frac{1}{4}$ -inch balls. There is a reinforcement in the fork crown which extends downward 4 inches. The top tube is sloped downward toward the rear, giving a lower saddle position than on the 1912 models. To the seatmast is welded the fitting for the rear or spring frame.

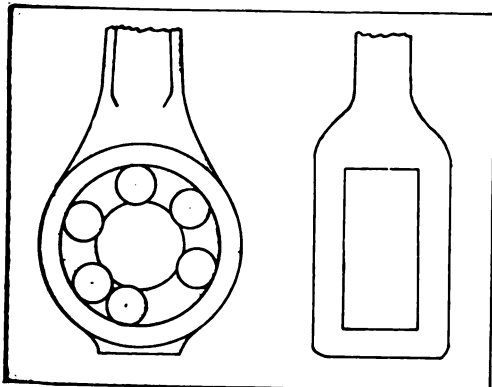
Spring Frame and Fork.—At the foot of the seatmast tube is fitted a cross tube on which the rear forks oscillate vertically. This tube is bushed and provided with oil cups. Extending vertically from the upper portion of the slider forks on each side is a tubular member which carries a yoke similar to that used in the cradle-type spring fork at the front. These yokes in turn are connected by a U-fitting which goes over the mudguard. The scroll ends of the leaf or cradle springs fit within these yokes and the butts are clamped between spring pads on a special steel drop forging which is welded to the rear of the frame. Each spring has seven leaves; the two upper ones are short while the third and lowest extend only slightly beyond the yoke. The intermediate leaves are formed into the scroll, which is fastened to the lower yoke pin by the usual roll.

Spring Frame Action.—The action is as follows: On the wheel striking an irregularity in the road, the whole of the spring frame rises, pivoting about the cross bearing and deflecting the springs upward, according to the nature of the irregularity. When conditions are normal, the frame resumes its original position with relation to the main frame. The action is very soft and easy, and the extreme deflection varies from 4 inches upward to $1\frac{1}{2}$ inches downward from the normal position. A special vanadium alloy is used in the composition of the springs. The front spring fork is the same as has been used on previous Indian machines. The widths are naturally greater to admit of the wider mud-guard and tire chains. Dust and water caps are fitted at the joints on the live forks of the front spring fork.

On the two-speed models, the forging mentioned is fitted with a brace-bar between whose lower end and that of the seat mast tube is placed the bottom bracket. On the regular models this bar is omitted. The forging is U-shaped and forked, and the pads are coupled by three bolts, the front ones passing through all the spring leaves.



7 h. Twin Model With T. T. Two-Speed.

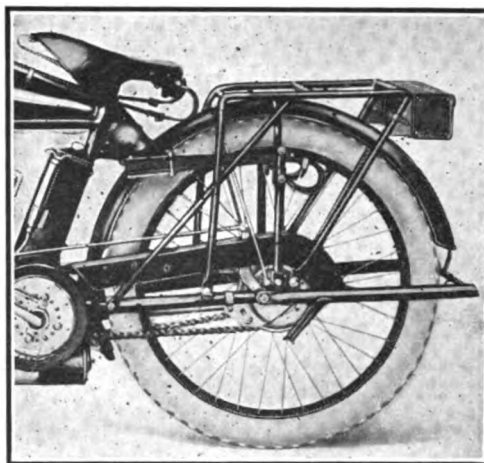


Connecting-Rod Forked Big-End, Showing Roller Bearing and Reinforcing Piece.

Tanks.—The gasoline tank is thinner and smaller in the tail, and the oil tank is thinner to fit between the seat mast tube and cylinder.

Starter.—This has been strengthened throughout. The foot-pin is hinged so that it can be turned out of the way of the rider's foot when not in use, and the pin is provided with a rubber tread. The latch taking the rebound now fits closely to the shank of the foot lever and there is no projection on its end to catch in anything. Other details remain the same.

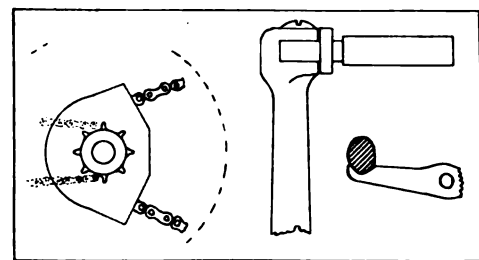
Mudguards, Wheels and Tires.—The mudguards are of heavier stock, with turned edges and so situated as to permit of the use of 3-inch tires and of tire chains without



Rear Construction on Regular Twin, Showing Frame Springing, Protected Transmission, and Novel Connection Between Springs and Frame Proper.

striking. Wheels are 28 inches in diameter and fitted with heavier rims; $2\frac{3}{4}$ -inch United States tires are supplied, this make being standard on the 1913 product. The exception to this tire size is made on the 7 h. two-speed model, which is regularly fitted with 3-inch tires.

Control.—This has been practically unchanged as far as the motor is concerned. On the two-speed models the clutch is actuated by



Swinging Foot-Pin of Starter With Rubber Tread. Recoil Latch Showing Close Fit to Lever Shank.

the left foot and the brakes by either left hand or right foot, or both. On the regular models the clutch is operated by a hand lever and the brake by a foot pedal or by back-pedaling with the regular pedals. A push-type, short-circuiting switch is fitted on the right handlebar of the two-speed models also.

Other Equipment.—A luggage-carrier of tubular framing is a regular fitting on all machines, and the tool box is held on a step at the rear of the carrier. This position gives ready access to the kit and leaves the top tube free for other purposes. The Superba saddle, of Mesinger make, is also stock equipment.

Color, etc.—The standard color is Indian red, the blue having been discontinued. Wheelbases are: regular models, 55 inches; two-speed models, 58 inches, these dimensions being an increase of 3 inches over those of 1912.

MADE 2,000-MILE TOUR.

CHARLES ALLWARDT, of Chico, Cal., recently completed a 2,000-mile motorcycle trip within two weeks, averaging about 150 miles per day. He made the round trip from Butte to Salinas, missing one day's travel and passing through San Francisco, Sacramento, Marysville, San Jose, Salinas, Oakland, Santa Cruz and Stockton.

BECHTOL'S UPKEEP RECORD.

CA. BECHTOL, of Gallion, Ohio, covered 4,172 miles on his motorcycle between January 1 and October 2 and gives the following account of his operating expenses: 44 gallons of gasoline, at a total cost of \$9.47; 17 gallons of oil (best grade), at \$10.26, and repairs amounting to \$5.75, making a total of \$25.48. During the period mentioned he missed only fourteen days of riding.

PUEBLO'S SEVERE RUN.

ELBERT JOHNSON, Harley-Davidson, was the winner of the road race held recently by the Sunville M. C., of Pueblo, Col., from Pueblo to Florence and return. Johnson covered the 66-mile course in one hour and forty-seven minutes. The roads were bad and very hilly.

HARRISBURG HAS A CLUB.

AT a recent meeting of the motorcycle riders of Harrisburg, Pa., a club was formed and the following officers were elected: C. Heagy, president; H. Heagy, vice-president; J. Keller, secretary, and S. Gougle, treasurer.

AT a recent meeting of the Victoria Motorcycle Club, of Victoria, B. C., it was decided to fine any member who uses his muffler cut-out within the city limits.

SEEKING A BETTER LAW.

A MEETING of the motorcyclists in Salt Lake City, Utah, has been called for the purpose of discussing a State motorcycle law, and to frame up papers to be presented to the legislature in the hope that more liberal laws concerning the motorcycle may be enacted. At the present time the riders are compelled to pay a fee of \$3.25 annually, for a local license only, and they are constantly hampered by the varying speed laws while traveling from town to town.

GIVES UP BICYCLES.

CF. DIX, of Stockton, N. J., who has for some time handled bicycles in connection with Indian motorcycles, has disposed of his push-bike business and will devote his entire time to the advancement of the motorcycle in his section.



MEMBERS of the Allegheny (Pa.) M. C., 150 strong, participated in their first club run recently, and the photograph shows them lined up ready for the start. The pic-

ture was taken in front of the headquarters of Harry L. Neff, 106-108 Federal street. The club is making rapid progress, and it is worthy of note that all the local dealers are

co-operating most effectively for its advancement. Officers have been elected as follows: J. Scott Graham, president; William Maier, treasurer; Harry L. Neff, secretary.

NEW TWIN FEATURES 1913 EMBLEM LINE

In Addition to Standard Single and Twin Seven Angola Company Will Produce 10 h. Chain-Driven Mount—1913 Models Have Mechanical Inlet Valves, New Cam-Gear Arrangement, Wider Forks and Improved Muffler—November Deliveries.

In consideration of the Emblem line for 1913, attention will at once be attracted to a new member of the Angola family, a sturdy 10 h. twin, which is designed to meet all the requirements of the rider who needs exceptional power in his mount. In addition to this model the company will produce its standard single and its twin 7, the former being furnished with either flat or V belt or chain drive, and with battery or magneto ignition; the latter being fitted with chain drive and magneto ignition only.

Mechanical Inlets Standard.

Mechanical inlet valves are now standard on Emblem machines, with a pushrod overhead rockerarm and in the camcase there is an interesting departure from common practice. All four cams on the twin—and the single's two—are mounted on one gear. This cam gear has a hollow shaft, and holes are drilled all the way through to permit of proper distribution of oil, thus insuring lubrication of the cam surfaces at all times.

This arrangement, in addition to providing for a compact camcase, simplifies valve timing. Because of the key fitted, the cam-gear cannot be replaced in other than the proper position, after it has been removed for any purpose. When the gear is slipped into position the valves are automatically given their correct timing. The perfecting of this valve gear must be credited to Superintendent J. C. Glas, who conducted an exhaustive series of experiments and tests before he was ready to give the improvement his O. K.

Bronze Bearings.

Emblem motors now have plain bronze bearings, new to the company's power plants, and several other refinements are noted. The cooling flanges on the cylinders are graduated in the 1913 machines, being wider at the top, thus permitting of the use of a lighter casting and giving a better general appearance. This arrangement also gives the greatest radiation area around the combustion chamber where the heat is most intense. The Heiger carburetor is standard equipment on the Emblem models as in the past.

No radical change has been made in the appearance of the machines, and the lines with which riders have familiarized themselves will be easily distinguishable in the Angola products for the coming season. Larger tanks are among the desirable new features of the machines; the capacity of the gasoline reservoir is now nine quarts and three quarts of oil may be carried.

Wider Forks are Fitted.

The spring fork embodies an improvement in that it gives the effect of a pneumatic cushion. There is an arrangement of packing around the plunger by means of which the air is compressed as the plunger starts its upward movement from the effects of a jar; the air cushion thus formed softens the action and assists materially in absorbing the shock. The forks are somewhat wider than in previous models, the additional allowance being made for heavier tires and to prevent mud from jamming between wheels and forks. There is

sufficient room for tire chains should they be found necessary in heavy going.

The Emblem spring fork dates back to 1904, when it was constructed essentially as it is today. So satisfactorily has it met the "test of time" that the company has not felt called upon to make a radical change in it. The flat, shock-absorbing spring used in connection with the seatpost on former models is retained, its performances over all kinds of roads having convinced the designers that it would be difficult to improve upon it.

An Aluminum Silencer.

Another new feature of the Emblem line for 1913 is an aluminum muffler. It is constructed with two compartments and is packed with asbestos. Tests have demonstrated that by the time the exhaust gases are forced through this device they are split up and cooled so that their final discharge into the air is not attended by any appreciable disturbance. Although the new muffler practically eliminates noise from the exhaust it causes little or no back pressure.

A sight-feed oil is provided in addition to a hand pump to take care of the lubrication, the simplicity and dependability of this system having led the company's designers to incorporate it in their improved 1913 models.

New Three-Piece Crank.

The new machines embrace a three-piece



A. Winnick, of New Haven, Conn., and Home-Made Sidecar Outfit on Which He is Using an Eclipse Clutch With Excellent Results.



crank, which is interchangeable so that a crank may be used on either the right or left side as it is needed. The Eclipse clutch is standard equipment. It has handlebar control, by a special lever of Emblem manufacture, or a side lever will be fitted if specified. The Corbin and new multiple-disc Eclipse brakes are optional. The frame head is of improved design, the forging having a large curved web between the upper and lower top tubes of the frames, thus affording additional strength at this vital point. The frames are regularly fitted with lugs for fastening tandem seat or a luggage carrier, so that the attachments may be fitter and removed with minimum trouble and loss of time. Incidentally, the Emblem tandem, which was formerly made for fitting to Emblem machines exclusively, is now supplied with fixtures which permit of its use on any standard motorcycle. For 1913 the Emblem machines will carry Troxel or Mesinger saddles at the option of the purchaser.

Emblem characteristics are also carried into the improved luggage carrier, which is of unusually sturdy construction. The framework is of channel iron, with five bars across the top. There are no joints to jar loose as all fastenings are brazed.

Deliveries in November.

Announcement is made that deliveries of the new models will begin in November, and an output of at least 4,000 machines is counted. The recent big addition to the plant doubles the company's floor space and will enable the force to keep abreast of orders in a way that has not heretofore been possible. The new five-story structure will be occupied at once and several thousand dollars' worth of machinery has already been installed. President W. G. Schack has his organization tuned up for big things and that his expectations will be realized is evident from the interest already displayed in the line with which the Angola company will meet the demands of its patrons for 1913.

ENDED TEN-YEAR SEARCH

FURTHER proof that MOTORCYCLE ILLUSTRATED may be depended upon to give results under all reasonable conditions is embraced in a letter received a few days ago from the Miami factory. A few weeks back a photograph of C. J. Kester, the new superintendent at the Flying Merkel headquarters, was published in these columns, and through it a friend who had been watching for news of Mr. Kester for the last ten years got into communication with him once more. The friend is now located in a small town in southern California. Following his discovery of the photograph there was a long-distance reunion which brought the participants mutual rejoicing.

TOURED TO SPRINGFIELD

F. W. HUELS, Indian agent at Madison, Wis., recently made a trip to the Wigwam at Springfield to arrange for his 1913 stock. En route he stopped at Buffalo, Albany, Boston, New York City, Washington, D. C., Chicago and Milwaukee.

SEEING AMERICA FIRST

How One Motorcyclist Made A Training Trip from Champaign, Illinois, to Virginia and Back to Boston Before Sailing for a 3,500-mile European Tour.

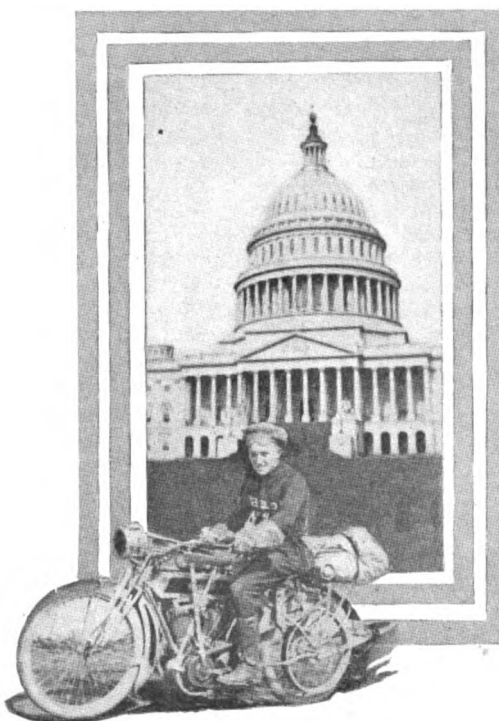
F. W. BAUM

DURING the winter months several of my motorcycle friends were accustomed to assemble at my home and discuss the merits of various motorcycles. The conversation drifted in time to touring in Europe by motorcycle, and as I had made a trip of this character during the summer of 1910, it naturally devolved upon me to give data and advice. The outcome of these gatherings was a desire on the part of my friends to make such a trip, starting in June after the close of the university. As it was agreed that two in a party was enough, we began to pair off, and I was pleased to find that Mark Henson, of Urbana, Ill., would be my partner.

Owing to various changes in our plans, we hardly knew what machines we would ride. The months flew along and still we had not obtained our machines. I ordered a new 8 h. M-M twin, with Spartan V-belt drive, and my partner at the last moment ordered a Harley-Davidson twin. It was upon the arrival of his machine that our date of departure depended. After Henson's machine was received the work of placing the equipment and luggage began in earnest, and it was a job demanding a lot of thinking. On account of various fittings on my upper tank bar I could not put my luggage there, as I greatly desired to do, and on a trip to Chicago I purchased an Atlas luggage carrier, guaranteed to support 500 pounds. I next bought three yards of 15 oz. canvas into which I securely rolled my luggage, then fastened it onto the carrier with five-foot straps one and a half inches wide. I had had trouble before in carrying a suitcase and also with straps that were too small. Henson had a heavy canvas bag in the form of a government haversack, which he securely strapped to his tank.

The Start from Danville.

At last came the morning for our departure, and to avoid the "gumbo" clay roads of Illinois, we checked our machines to Danville and made our formal start from that point. We had breakfast and then, as I had been over the roads before, I started out to be the pilot. Not far out it entered Henson's cranium to take the lead, and I did not interfere with him. After we left Covington, Ind., he took the wrong road and I knew it; but he was quite a distance in front, so I thought I would let him go and "rub it in" afterwards. About eight miles out of Crawfordsville it began to dawn on him that he was "in bad." The road was so muddy that we could hardly keep in the saddles, but our powerful twins plowed right along. It was utterly impossible to pick a path to ride on; we gave that up as a bad job. Next we tried to run alongside the machines, but the mud was too deep. Henson's mudguards quickly became packed with the



F. W. Baum.

sticky clay, which acted as a brake. Several times he had to stop and dig out the mud with the handle of his pliers.

Finally we rolled into Crawfordsville, Ind., and procured quarters in the Y. M. C. A. building. We got up before the building was opened and climbed down the fire escapes to within eleven feet of the ground, then dropped the rest of the way. At the garage Henson noticed that his rear tire was flat, so we took out the tube, but could find no leak, even when it was placed in water. We tore off a patch thinking it was responsible for the trouble, repatched it, and placed the tube in the casing. Then we pumped it up and instantly found the air escaping. That tube was taken out four times without finding the real cause of the trouble. Suddenly I had a "hunch"; I tried the valve stem and found it loose in the tube.

Fitting Accessories.

It was only seven miles to New Ross, but I had two falls while riding the three-rut roads; there were two ruts where wagon wheels ran and another bad one where horses traveled. It was poor going all of the forty miles to Indianapolis, as we rode through a drizzling rain. At 11.45 Wednesday morning we arrived at Indianapolis. Here we bought our accessories. First we hunted up the Stewart speedometer salesroom and had a front wheel drive No. 43 instrument put on Henson's

Harley—I already had a Stewart rear drive. We next went out to the Heitger carbureter factory at 1225 Beecher street and both had Heitger instruments put on our machines. Next in order came our lighting systems. We had Prest-O-Lite gauge tanks put on. We also needed extra tubes, so procured one each at the Diamond branch.

At one o'clock the next afternoon we left for Dayton, Ohio. The roads were excellent and at 1.25 p. m. we went through Greenfield, which has a large fine courthouse on the new National road. In some way Henson's brake locked as he was hitting up a fast clip and his rear wheel slid at least 60 feet over the gravel. Upon examination, we found that he had used up several hundred miles of his tread in the slide.

From Dayton to Springfield.

For twenty miles out of Dayton the route was very rough. It was while riding over these roads that my baggage became loosened and my Schebler carbureter, which I had put in the luggage roll, found an opening and dropped out. It was too late to return and look for it, so I was obliged to forget it.

We arrived in Dayton at 7 p. m., 240 miles from home. We did not tarry long in this city, but set out for Springfield, about 45 miles distant. It was getting quite dark, however, and ten miles east of Dayton we decided to close our ride for the day; we were without headlights. Owing to a mistake in shipping our Rushmore lights, Henson had billed them through to Columbus, Ohio, instead of to Indianapolis. We had to ship them because we could not obtain suitable brackets before starting.

We put our machines in a barn and slept in the hay. At about 7 o'clock the next morning we arose and started again for Springfield. The roads were mediocre until a few miles from the city and then they were fine. After spending a few hours in Springfield we left for Columbus, and about 13 miles from this city found a boulevard-like road.

A Rear-End Collision.

Our first desire upon reaching Columbus was to find our way to the American Express Company and get our headlights. We found our lamps intact and quickly clamped them on our machines. Suddenly I remembered that the American Motor Company had shipped me a shock-absorber, in care of the Diamond Tire Company, and I hastily procured the road smoother and attached it to my machine. Then we were soon off for Zanesville, Ohio, 54 miles away. As it was late in the afternoon when we left Columbus, we did not arrive in Zanesville until 5 o'clock, and we decided to put up there for the night. Early the next morning we left for Wheeling, W. Va. We took

breakfast in Cambridge and then went to St. Clairsville. Before reaching Wheeling, we ran into considerable mud. Henson, who was riding directly ahead of me suddenly struck a chuck hole, and as it was too late for me to stop, we had a rear-end collision. Henson's stand was bent, and we found a garage and had it straightened. Then we rode about the city. The streets, although leading up and down steep hills, were well paved. We were escorted out of the city by a fellow motorcyclist, who rode with us for about five miles. The National road soon became a mass of projecting rocks, as the original ballast had all been washed away. Little did we realize that this was the characteristic condition of the road for many miles. The authorities of Washington, Pa., however, have rebuilt about eight miles of the Pike.

A Long Mountain Climb.

Finally we reached West Brownsville, where we paid five cents toll to Brownsville. We there saw on our right what was left of the old National Pike bridge, which for several years has not been used. From here on, there was pretty scenery up to the Summit House Hotel, which was reached from the west after a long, winding climb up a bad mountain road. At one place we had to push our machines through deep clay gumbo, a feat next to impossible, or ride to the edge of the old Pike, and let our machines down on a plank

to the road five feet below. We chose the latter course.

There was another mile of climb from this point to the Summit House, so I set out. My twin nobly made the steep grade and after I had waited a while, I began to be worried about Henson. I could not see him coming over the brow of the mountain, so I coasted down for half a mile to where Mark was sitting alongside his machine "all in." He had had difficulty in making his engine develop its rated horsepower because he was loath to change his carbureter, even when advised that he would have to meet the climatic conditions. At last we got it to mixing properly and made the ascent.

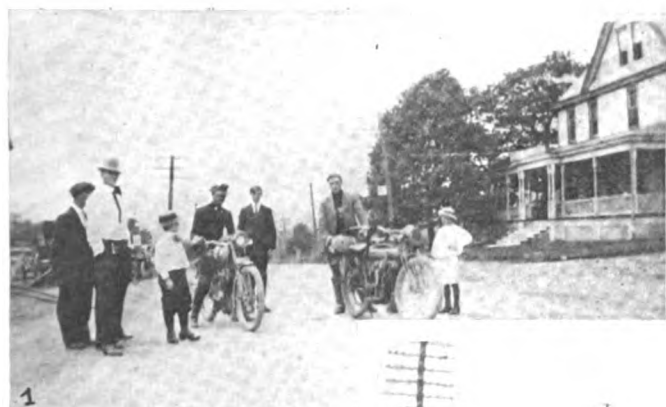
A little further on we came to the Chalk Hill Hotel. Five miles from Chalk Hill we came upon an old settler, and asked him if there was anything of historical interest along the road. He politely informed us that within a hundred rods of the rear of his house was the site of Old Fort Necessity. We were elated at this discovery, and by climbing over fences and going down narrow lanes, we came upon this interesting place. Nearby is General Braddock's grave, and this is given considerably more recognition than the fort. The old settler told us, upon further inquiry, that "Braddock fit the Injuns all through here."

Near Grantsville, Maryland, we came down a steep incline and found that a concrete bridge

was being erected across the road. For temporary use the contractors had constructed a makeshift bridge of wood to one side of the road. The short approach at either end of this bridge was of clay, and as it had been raining there only a few hours before, this stretch was very slippery. As I started to climb the approach, my rear wheel skidded and before anything could be done my machine crashed into a post at the edge of the passage.

We could hardly realize the extent of the damage for several minutes, but when we started to push the machine up the incline the front wheel would not pass the frame. We carried it up to the level road and then made an investigation. The frame was so badly bent that the machine could not be used until repairs were made, which were entirely out of the question there.

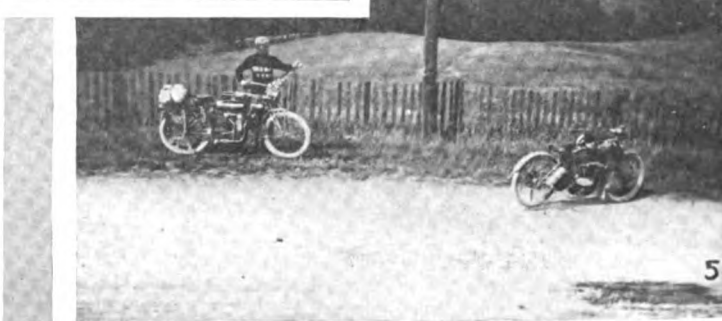
It was while Henson and I were waiting here, unable to decide just what to do, that a Mr. Carpenter hove in sight. After a time it was decided to let Mark go to Frostburg and see what he could do about repairs, and Mr. Carpenter agreed to keep me company for the night. There were no accommodations for us nearby, so we picked out a spot in the woods suitable for a camp. About as soon as we had fire going it began to rain—one of those cold, discouraging rains. We had nothing with which to cover our machines so they had to take a wetting.



1—Baum's start from Champaign, Ill.; 2—A sight-seeing stop in Hartford, Conn.; 3—A stretch of Virginia road;



4—One point at which the roads were being "repaired"; 5—A stop just outside Boston.



We walked about two miles to a farmhouse, formerly called the "Stone House Tavern," on the National road, and sat down to a good supper with twenty-two farm hands. We waited a while for the rain to diminish, and finally waded back to our machines. We had decided to stay with them for the night.

A Memorable Night.

We used a large, decayed branch on which to hang our wet clothes, placing the butt end of this branch at the base of the fire and arching the other part over our bunk. I hung my coat and raincoat on little stub knots of the branch. Carpenter awakened me some time later and said something was burning other than the wood. I jumped up and found that the fire had eaten its way up the hollow log and out at the knots on which I had hung my coat. I found that it had badly burned my coat, melted my fountain pen, and nearly destroyed my book of travelers' cheques.

About noon Henson and a native came driving up with a spring wagon. We loaded the machine and hauled it to a garage in Frostburg. There I found a repair man who said he could fix the machine. I let him work on it, and returned to Frostburg that evening with the repaired frame. We assembled the machine and were ready for the road again.

Winning a Wager.

The repairman asked me if my M-M would climb Big Savage Mountain. I told him it would, having full confidence in the machine. He told me to try it and I did. The road is three miles long, and quite steep, but I made the ascent. I returned and told him of my success, and added that I could take him up also on the luggage carrier. He said if I could do it he would cancel my bill at the garage, and if I couldn't I should pay double. I agreed to this and took him up the mountain at thirty miles an hour. He was surprised and took his defeat with a laugh. We were now ready for our trip to Washington, D. C.

We left Cumberland, Md., about noon and started for Winchester, Va., the road being full of sharp curves, streams to be forded, rocks and steep grades. We dipped, bumped and climbed, and at last wended our corkscrew-like way to a little hamlet that was honored by the name of Springfield. It was getting late so we put our machines up in a blacksmith shop

and found lodgings for the night. In the morning I was off for Winchester, Va. This is where I had to part company with Henson, as his journey was scheduled a little differently from mine. I crossed the Big Capon River to Winchester and went from there to Hagerstown, Md., and over a fairly good road to Harper's Ferry. From here the road runs close to the river all the way into Washington and, in our opinion, the roads are decidedly poor for a government's capital district.

Leaving Washington.

On arriving in Washington I went directly to the Diamond Tire Company's office, where I was treated very cordially. I cleaned my machine, went over the mechanical parts carefully, and tightened all nuts and spokes. Another thing to look after is the tread of the tires, so I took a small knife and picked out all of the foreign matter that had worked its way into the tread.

A peculiar thing happened to me while in Washington; I was going along Pennsylvania avenue when a chap on a Merkel rode up to me and asked if I were not the fellow whom he allowed to try his machine two years before. I told him that I guessed I was, but would give him credit for having the best memory for faces of any one I knew, for it was only for five minutes that I was with him in 1910.

On the morning of July 7 I left for Baltimore. At Royal, I met a fellow on a four-cylinder machine bound for Philadelphia, so we decided to go together. He was an aviator of some experience as well as a motorcyclist. We rode through heavy sand for a few miles, and then came to a fairly decent road.

I arrived in Baltimore with my machine in good condition, but I was out of gear mentally because of the rough paving on the streets of Baltimore. This city has the most abominable pavements I ever encountered; they were really worse than the National Pike. For the sake of my machine I left it in a garage and did my city riding on the street cars. There was little to interest me here so the next morning found me on the road to Philadelphia. I left Baltimore over the Valley road, which is very good, but winding, makes speeding dangerous. I had a give-and-take road to Havre-de-Grace, where after paying twenty-five cents toll, I went over the Susquehanna Bridge.

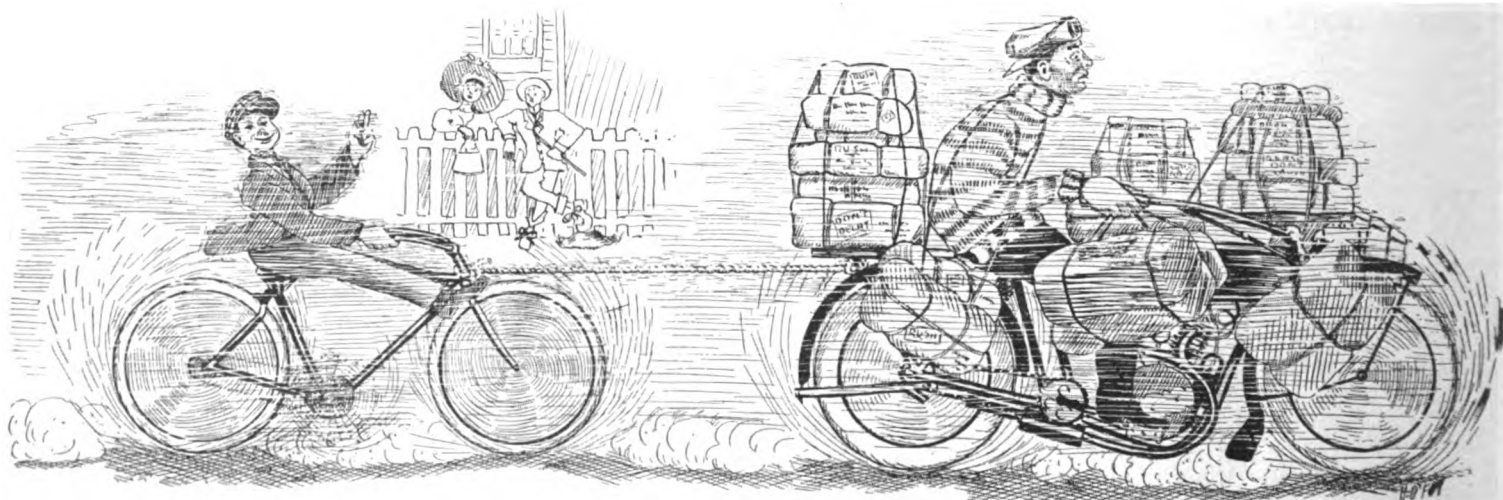
On the Way to New York.

From here on to within three miles of Newark, Delaware, I encountered the deepest sand I had ever struck. The roads were very difficult to ride, as you had to put your feet out and sort of walk them along the top of the ruts to steady your machine. I made good time over the macadam road into Newark and on to Arlington; two miles before I reached the latter place I paid five cents toll to ride over four miles of smooth macadam—and it was worth it. From this point I went into Pennsylvania again, and rode along the Delaware River to Chester; a thriving city of 40,000 inhabitants. I arrived in Philadelphia late in the afternoon and stayed there until noon of the next day, in the meantime visiting such historical points of interest as Independence Hall, Franklin's home, etc. I left Philadelphia at 12.25 p. m. for New York, and took the road to Trenton, N. J., where the natives will show you just where Washington crossed the Delaware. From Trenton route goes through New Brunswick to Perth Amboy. I paid ten cents to cross on the ferry from Perth Amboy to Tottenville, Staten Island.

The road through the island to St. George is fine. After riding in a hard rain from New Brunswick to Perth Amboy it was a relief to get on smooth, dry macadam. I will not say how fast I rode over the island, but then the road was in such fine condition I just couldn't help "letting her out." I had not gone far when a brother motorcyclist signaled me to stop, and then told me to look out for motorcycle officers in plain clothes, as they were "pinching" many of the autoists and riders. I thanked him and rode on more carefully, but not very slowly, to St. George. Here I crossed to New York City for fifteen cents. Arriving at the Battery, I rode directly up Broadway to the Diamond Tire building and there left my baggage.

A Visit to the Hub.

On the morning of June 12 I was ready for a 256-mile ride to Boston. I followed upper Broadway for several miles, and eventually came upon the Boston Post road. Owing to recent rains the road was bad, as the oily surface would not allow the water to soak into the ground; in many places it remained in puddles. I stopped at New Haven, Conn., and visited Yale University. Between New Haven and Boston I made a few stops, one for a visit at the Persons saddle company's



Business Before Pleasure.

plant in Worcester, Mass. I arrived in Boston at dusk, having made a very fast day's run. I wished to see the home of my machine, so after a fine sleep I left for Brockton, a distance of twenty-one miles over good roads.

At the M-M Factory.

On the erecting floor at the M-M factory, I was much interested in the new Eagle, the recent product of the American Motor Co. The large nine horsepower motor and beautiful lines of the machine appealed to me, and I had a longing to possess one. Although I hated to part with my M-M, which had so successfully carried me over 2,000 miles of roads, I eventually traded in my old machine for a new Eagle twin. I transferred all my equipment from my other machine to the new one, even to the tires, as I wished to see how long they would last. Then I returned to Boston, and the next day I made arrangements to sail with my machine for Liverpool on the steam *Bohemian*.

(To be continued.)

A HARRISBURG SQUAD

FOURTEEN months ago there was only one Harley-Davidson machine in Harrisburg, Pa. Now there are—well, the photograph tells the story. Heagy Bros. have conducted the H-D campaign in Harrisburg, and they are naturally proud of the results they have achieved.



HELD POSTPONED HILL-CLIMB.

FOR some time a special committee of the Providence (R. I.) Motorcycle Club has been looking for a suitable hill on which to hold the climb which was postponed from last summer, and only recently a suitable grade was located. The committee selected a hill about half a mile long, fairly steep, straight and of good macadam surface. B. A. Swenson won the event in 25 seconds; Cliff Frozier was second; J. C. Garand, third; C. A. Anderson, fourth; A. Carlson, fifth, and J. G. Edwards, sixth. The club also announces the opening of its pool tournament on November 1. Preliminaries will be played for 100 points, and the final contest will be for 300 points.

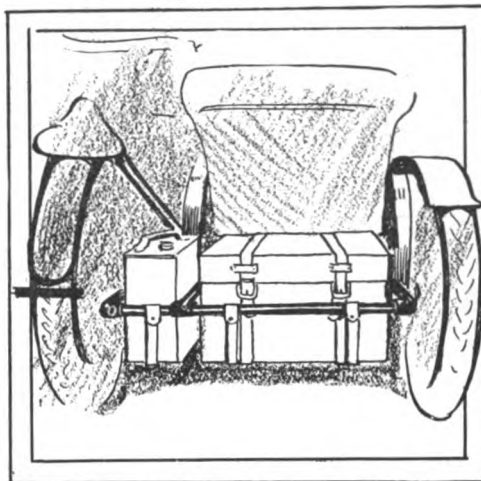
MOTORCYCLE CLUB LEADS.

WITH 100 machines, all decorated, members of the Bay Ridge Motorcycle Club of Brooklyn, N. Y., headed the parade recently held in celebration of the extension of the Fourth avenue subway. All along the line the boys were applauded. After passing the reviewing stand they proceeded to the clubhouse where luncheon was served.

The members are looking forward to the smoker which takes place November 1, and are also anxiously awaiting the result of the pool match between President Campbell and Chairman Deckelmann, two crack shots. The annual ball will be held at the Borough Park Clubhouse on January 13.

FOR SIDECAR LUGGAGE.

A NUMBER of English side-car designers have turned their attention to luggage-carrying devices for the third-wheel passenger attachments, and as a result the problem is being satisfactorily disposed of. The accompanying illustration shows a side-car fitted with a new rear luggage rack, or frame. It will be



noted that there are two sections in the frame, one of which may be used for a trunk and the other for an extra oil can or similar article.

MERKEL AGENTS.

FERD STENGER, of 802 Vine street, Cincinnati, has just closed for the 1913 Flying Merkel agency, and has ordered half a carload of machines to open the season with. A new Miami agency has also been placed in Akron, Ohio, where William Coleman will represent the Middletown folks for the coming season. Coleman will open a new establishment and handle the Miami products exclusively. Newby Bros., of Kansas City, Mo., have closed for three counties in Missouri and fourteen counties in eastern Kansas. The W. D. Andrews Company, of Buffalo, N. Y., will distribute Merkel machines in western New York and eastern Pennsylvania, and Fred J. Barr will handle a large section of Iowa. These agencies were all closed in one week by Assistant Sales Manager Valiant, who is now on the road. "Val" reports, by the way, that half the 1913 output of the Merkel plant has already been contracted for, despite the fact that the company has not yet made its announcement.

A SIDECAR OUTING.

HOWARD TROMANS and Arthur Barber, with Misses Mildred Hyland and Nina Colvin as side-car companions, recently made a motorcycle trip from Providence, R. I., to Danielson, Conn.

SURVIVED THE STRAIN.

IN the accompanying photograph is shown a Baxter side-car which was entered in both the Triangle and the Providence runs, recently held; it finished with a perfect score in the latter. It was attached to a single Indian, and thus proved the adaptability of the single machine for side-car work. The picture shows the machine fitted for the Triangle run, with a Mr. Clark in the side-car and J. S. Baxter on the Indian; the third party is Mr. McDonald, a Hendee representative. The side-car stood up well under the severe tests, climbing both Jacob's Ladder and Leicester hill during the run. Its failure to finish in the Triangle test was due to no fault of its own; magneto trouble was encountered at the



top of Jacob's Ladder, and so much time was lost that the crew of this side-car outfit could not catch up with the schedule. Between the Triangle run and the Providence run the machine and side-car had covered just 500 miles, which makes its perfect score in the latter all the more remarkable. The side-car shown is an \$80 model, which is in big demand.

SOUTHERN ENTHUSIASM.

WHEN it comes to enthusiasm, P. M. Huff, Harley-Davidson agent in Piedmont, S. C., probably has a slight lead on most of his competitors. He recently wired the H-D factory as follows: "Have a fine boy a month old and have named him Harley, after your Mr. William S. Harley."

A CHESTNUTTING TRIP

A SUNDAY run to Hanover was recently held by the members of Maryland Motorcycle Club, of Baltimore. The route had previously been gone over by one of the riders, who had selected some fine chestnut groves, where the boys had no difficulty in loading up.

READING CLUB ENTERTAINS

MORE than thirty members of the Harrisburg Motorcycle Club recently made a run to Reading, where they were guests of the Berks County M. C. A chicken dinner was served in the Reading clubrooms for the visitors, whose appetites were keen.

My FIRST YEAR ON the ROAD

By PHILIP · H · COX

"WHAT'S the matter, Mister, won't she go?"

The speaker was the proverbial small boy who invariably appears on the scene when the motor refuses to move, and his innocent but irritating query was addressed to me on a certain afternoon when I was trying out my first machine. For a moment I glared at that boy, but finally I was obliged to take him into confidence and confess that "she" would not go. This should have been obvious to the ordinary observer, but that boy forced me to make the statement baldly; "she" wouldn't go, and I had to admit it.

I had had my Excelsior 4 battery model but a few days and was just itching to try it out. It was late in the afternoon of a hot July day when I pushed it out of the shed and prepared to take my first spin. As I had been used to riding a bicycle for years previous to getting the motor, I was surprised at the difference in the weight, my bike weighing 30 pounds and the motor 200. Well, I tried it on the stand first, just to hear it run. Then as I had no free engine clutch, I ran alongside the machine till it fired and mounted from the pedal. I enjoyed a ride of ten miles and was about one mile from home when on turning a sharp corner I shut off the power and then turned it on again, but there was no response. I put the machine on the stand and pedaled and pedaled, but could not get an explosion. As I have already said, the weather was hot and close and to make matters worse, the mosquitoes were getting in their fine work, so I decided to push my mount home.

I worked on it two hours that night, but as I knew practically nothing of the fundamentals of a gas engine, I made no progress and finally telephoned two friends of mine and they both promised to call in the morning and look it over. Well, we tackled it in

the morning and had worked about an hour when some one suggested cleaning the spark plug with gasoline. I immediately attempted to draw some from the pet-cock, but it would not run, so I looked in the filler hole at the top of the tank and you can imagine my disgust on finding the tank empty. Needless to state, this was a lesson and I have not been caught that way since, though I have ridden thousands of miles.

A Year of Uncertainty.

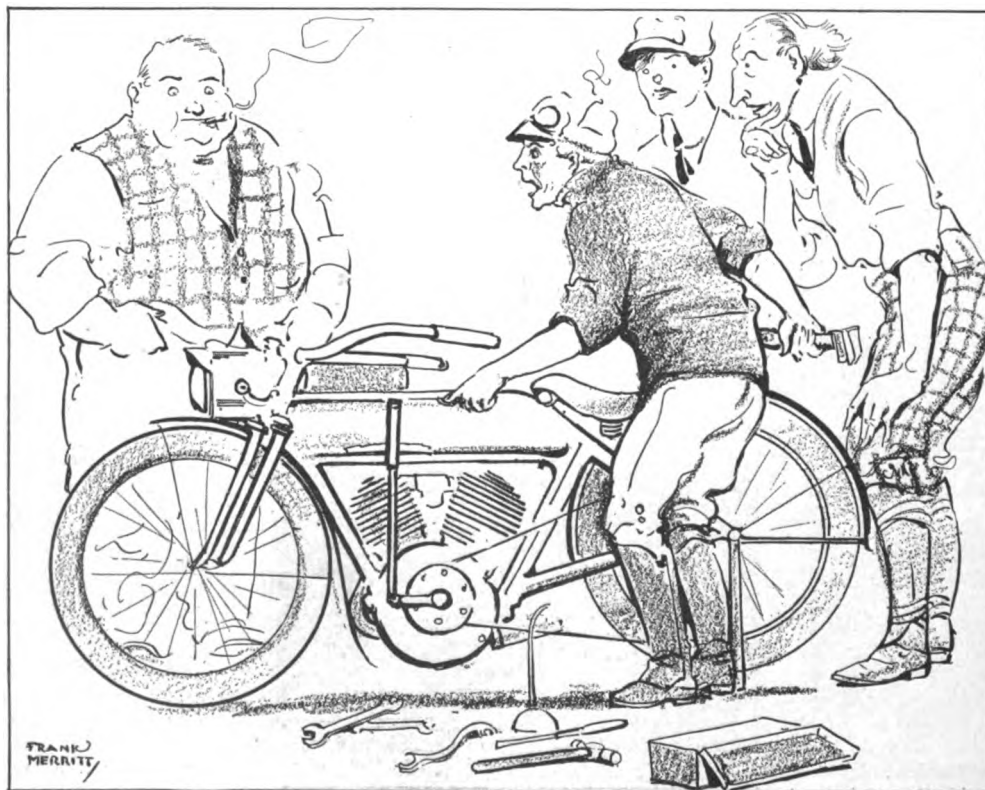
During the first year that I rode a motorcycle I seldom took a ride that something did not happen to the machine that would cause my heart to palpitate in the fear that I would be unable to correct the trouble and would then have the problem of getting both myself and the machine home. By the end of that year, however, I had sampled nearly all the ills known to the motorcycle. Now that I look back on those experiences I realize that nothing of a serious nature occurred, such as parts of the engine breaking, but only little things, like valves sticking, loose terminals, etc. One day my machine was working per-

fectly, when suddenly it refused to fire. I continued to coast along while trying to manipulate the grip controls so that I might induce a return to life, when I discovered it would fire when the throttle was full open. I put it on the stand and spent about an hour trying to figure out the trouble and then decided, as it was getting dark, that I had better push the machine home.

Again I telephoned a motoring friend of my troubles and he came and looked the mount over with me. When I told him of the "symptoms" he said: "Your automatic air shutter must be stuck so that it opens only with the full suction of the open throttle," and sure enough when he tried to open the shutter with a match he found it almost impossible to loosen it; when we finally worked it loose I had no more trouble, and during 10,000 miles of riding this valve stuck only three times. Still I never forgot those symptoms, and while my first experience caused me to push the machine home and spend hours locating the hitch, the subsequent troubles were remedied without leaving the saddle—I simply used a match to force the shutter open and off I went on re-

joining that I was at least master of my machine on that point.

I believe that if there is one factor in my experience that has contributed more to stimulate my love for the motorcycle than any other it is the fact that I have generally learned the cause of my trouble as well as the cure, thereby becoming its master. The most frequent motor trouble I had was caused by the platinum points requiring adjustment. I soon learned that the points I had required adjusting about every 75 to 100 miles. I finally bought platinum iridium points, at \$1.38 each, and they wore three times as long and did not need to be adjusted oftener than every three or four hundred miles. I found that



"After working for an hour I discovered to my disgust that the tank was empty."

most of the ignition troubles had about the same symptoms and that they never need to be confused with carburetor problems.

I might say that while riding 10,000 miles on this machine I never found my carburetor responsible for stoppages or trouble except when the shutter in the automatic air valve stuck fast three times and the float stuck once.

A Mysterious Stoppage.

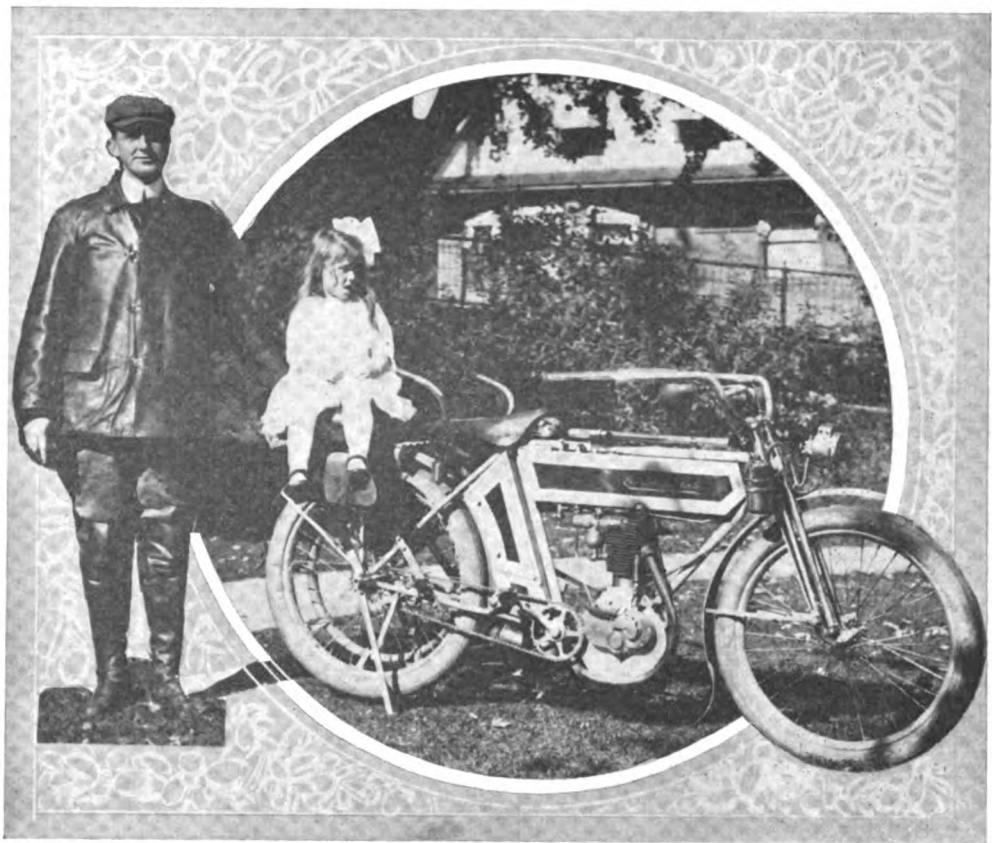
I used to take my wife out on the tandem seat a great deal, and as I live in North Jersey it is almost impossible to go for a ride without having to negotiate hills. I had found that a 4 h. machine had to be in pretty good condition to take this load up the hills, and that if there is a weak spot anywhere in the machine it will be sure to be found. We were riding tandem one day when we noticed on the hills that the motor seemed to miss explosions in a strange way, until finally as we were climbing an unusually long grade the motor stopped. I put it on the stand and, lo! it went as fine as ever, so I jumped on alone, right there on the side of the hill, and went up to the top all right, but I knew there was something wrong and decided to investigate at once. I figured at once that the motor fired too well up to the time it stopped altogether for the stoppage to be due to ignition trouble.

I was sure it was not the carburetor, but it did seem as if the gasoline pipe might be stopped up, because my trouble was emphasized as I opened my throttle for a length of time. On removing the feed pipe at the carburetor, I found there was very little gasoline running; then I took off the part connected to the tank, which contains the strainer, and found the cause of my trouble was accumulated dirt at this point. After cleaning this out and reconnecting the pipes I found my trouble was entirely removed. Now, as you can readily see, this might have kept me guessing a good while if I had not mastered each problem as it had occurred up to this time so that I was able to apply a process of elimination.

Handling Ignition Troubles.

I was on a trip through Long Island when I noticed that while the motor ran well on a retarded spark, it would miss on the advance. On looking over the machine I decided this trouble was not caused by the platinum points, because it was firing regularly on the retarded spark. For the same reason I knew it was not caused by the spark plug, nor was it brought about by weak batteries, because my spark was up to its regular efficiency while retarded; so I reached the conclusion that the current was interrupted by a break in the wiring, and sure enough the constant change of the position of the commutator had broken the primary wire. I always carried a piece of wire along to make such repairs, and it was only necessary to splice the broken wire together and tape it and I was ready to go. How simple a thing may bring your engine to a standstill, and yet how simple a matter it is to remedy the trouble when you are acquainted with your machine and have the wherewithal to do the work.

When the terminals work loose you will notice that your engine will miss firing occasionally or altogether, depending on whether they make any contact or not. When your batteries are weak you will get symptoms that are different from most any others, because the result is a weak spark. Your motor may not miss an explosion after you have got your load under way, but you will notice that it is



Philip H. Cox and His Tandem Mount.

almost impossible to start; also you will be unable to make the hills you used to make with ease. By taking a screwdriver and making a circuit between the commutator and the crankcase you will notice whether the spark is snappy or sluggish. I recall an experience I had one day when I had my wife on the tandem seat and I had such symptoms as I have just described; I jumped to the conclusion that my batteries had run down, and left my wife by the roadside while I rode about five miles to the nearest garage for batteries.

An Incorrect Diagnosis.

As soon as I had lightened my load I felt my engine work better, so I was sure I had judged correctly. The batteries were soon in place and I hurried back. We started for home with about fifteen miles to go, and on taking the first hill I observed the same old trouble, a weak spark; it did not miss, but lacked power. By letting my wife walk the worst of the hills, we finally got home. Now, strange to say, during this experience I was aware that the platinum point on my spring was nearly gone, but thought there was enough for a while longer. I had an extra spring and point and slipped this into place and then tried it out on a hill and sure enough my trouble had been with the point and not with the batteries. On examining the old platinum I discovered that the little chunk left on the spring was only the brass that was used to solder the platinum to the spring. I used the same mica spark plug that came with the machine for 10,000 miles, and never had any trouble with it and only had to clean it three or four times.

I was preparing for a three days' trip once when a friend came along and saw me cleaning my plug. He remarked that he did not think I was getting the best results from my engine by using this particular make of plug and suggested that I try one of his that gave a "fat, hot spark." I put his in place instead of

mine and tried the engine on the stand; it ran all right, so I put my plug in my tool kit. I had quite forgotten about the plug on the following morning when I started off, but I soon noticed that the motor was not firing regularly. I stopped about ten times in the first five miles and monkeyed with the platinum points, terminals and wiring, needle valve and most every part of the motor, till finally in sheer desperation I thought of the new plug. I got out my faithful old plug, whose looks my friend did not like, and put it in place, and presto! my trouble had disappeared. Moral: When you know your machine is working all right, don't yield to the temptation to monkey with it.

Referring to Carbon.

While some riders contend that a motorcycle engine ought to be taken down and cleaned every 1,000 miles, I found that by careful oiling my engine did not carbonize until I had run 4,500 miles. It is a very easy matter to determine when this work is necessary; for instance, when climbing a long, steep grade you will notice that your motor "knocks" a great deal; also after cutting out your switch, it will sometimes continue to fire for a while. I used to dread having to do this job, but I found it quite simple. It generally required but three or four hours, providing I had some assistance to lift the motor out and put it back.

Personally, I believe a man will be happier without any machine than with a poor one. Assuming that you have a good machine, you should be able to go out for a 100-mile ride with perfect confidence in your ability to return home on time, just as you would if you employed any other type of locomotion; providing, of course, that you have made a careful study of your machine and carry the spare parts you may reasonably expect to need.

A SINGLE BARREL ENDURANCE RUN

GEORGE · M · JOHNSON

I HAVE read in the motorcycle papers of numberless endurance runs—from a big F. A. M. affair with hundreds of riders, down to some humble club jaunt with only half a score, and I have possessed a hankering to go into a good, stiff contest—the stiffer the better—and prove that I also had enough stamina, skill, and stick-to-it-iveness to jerk my own two-wheeler through the worst combination of bad roads and weather that could be sent out from Washington by the official forecaster. Finally the endurance run came along—but under the deceitful disguise of a pleasure trip, nothing less than an expedition into the haunts of the speckled trout.

One day during the past summer I was putting peacefully along when someone hailed me from the sidewalk. It was an old-time hunting and fishing comrade, and I promptly pulled up to the curb.

"Want to go trouting on Saturday?" was his greeting. "There's a chap coming out from New York to go with me, and we're planning to take a look up Woodbury way. Glad to have you come along, if you want to."

"How you going?" I asked.

"His folks live in Seymour, and we'll spend the night there. We'll drive out the next morning at four. You could come up on your machine, and then we'd start you on the right road."

"Sounds good to me," was my cordial response, "and I'm much obliged for the invitation."

An Inauspicious Start.

On Friday it rained, and I thought of those back-country roads with a sigh. However, Doc, my fellow sportsman, reported that the two of them would go rain or shine, and I hated to miss a trouting trip in a country new to me. The weather looked so doubtful that I couldn't say definitely whether I'd try it or not, but it was decided that they should wait for me until four; if I failed to appear before that hour they were to go on without me. Seymour was about twelve miles distant, an easy half hour run in good weather, but one cannot average a twenty-five mile pace over rain-soaked dirt roads. I set my alarm clock for half past two, planning to go if the rain had stopped; otherwise to slip back into the downy.

Next morning the weather was still doubtful, but there was no rain falling, and I determined to go. I fixed up a hasty breakfast and collected my junk on the machine, with the headlight working, for what with clouds and fog it was nearly as dark as pitch. My preparations took longer than I had expected,

so it was 3.30 a. m. when I finally pulled out; that gave me half an hour to make connections.

Plugging Muddy Roads.

The roads were fierce, and I skidded and slipped around in grand style; I kept dry though, for my high rubber boots were made to shed mud and water. About half way to Seymour, as I was plugging up a bad hill, the steady throb of the engine suddenly stopped, and in its place I could distinctly hear the plaintive call of whip-poor-will from across the misty uplands and meadows. It was well worth listening to, but just when I was more interested in the engine, for time was getting short. I jacked the machine up on the stand,

and started the motor on the first kick of the pedal; the difficulty was probably due to a small particle lodging in the spray nozzle, in that way shutting off the flow of gas for an instant. By using the clutch and pedalling a bit I easily started the machine up the hill. That is one beauty of a twin; by means of a clutch you can usually start one up even a steep incline.

The last few miles into Seymour were over fairly smooth roads, and in spite of their slippery condition, I opened up somewhat and went roaring along at a forty-mile clip. Even so, I was five minutes late, but the others were also a few minutes behind time, so that I made connections.

Then followed the most tiresome ride I have ever undertaken, for I had to keep in communication with the men who drove the plug. I'd ride along a couple of miles and then wait for them to catch up, and so on. My wrists became tired from the effort of holding the machine to the road; a greased pig would have been like sandpaper in comparison with that highway, and as usual they had been "repairing" it in many places, which only made matters worse. My one consolation was that it would be dry when I returned.

No Improvement in the Weather.

Everything has an end, and that early morning ride was no exception to the general rule. We left the nag and the motorcycle under the shed of a small country inn, and turned our attention to the fishing. The stream there was a good one, but rather short; there was not much room for three anglers, and so after several hours of strenuous work, we were through with it, having fairly satisfactory results to show. Then we went back to the inn, where a brief but cordial episode occurred in the room devoted to liquid nourishment.

It was then late in the morning, and the weather, instead of clearing up, was constantly getting blacker around the edges. I was minded to push for home, some twenty-five miles away, but the others had more plans for fishing and began to rave of a mystical brook, swarming with trout, and off we started again. Brother, did you ever ride a husky twin for miles and miles at the pace of a spavined skate? For your sake I hope not, as it is no blissful sensation. The worst of it was that those two guides knew only a trifle more about the location of that brook than I did, and I had never heard of it before. We stopped now and then, sometimes oftener, to ask our way at farm houses. Some people told us one thing; some another, which is the usual result when you inquire your direction.



The Author as he Appeared Before His "Single-Barrel Endurance Run."

Doc and I left the other chap, and wandered off through a wilderness of thickets and fog in which that mysterious brook had concealed itself. After we were well in, it began to rain—not a half-hearted drizzle that never gets anywhere, but one of those good old-fashioned, Daddy Noah deluges that knocks big dents in a tin roof and makes you feel like going to the bottom of the river to keep dry. Great carbureters, how it did come down! Right there I commenced to get glimpses of a solo endurance run.

When Doc and I finally escaped from that combination morass and mosquito farm, we were very wet. That's a mild word, I admit, but the strongest adjective in the English language is too feeble to express how hopelessly wet we were, so what's the use? The third member of our party had fled to a farm house for shelter, and was just as dry as we were the opposite.

That Solo Endurance Test.

Still it rained, and they began to give me all sorts of advice about the way home. It was twenty-five miles in a straight line, but they insisted that I take a roundabout route, much longer, but which (according to them) would give me decent roads.

When I attempted to start out, I made the pleasing discovery that my rear tire was soft—tires always pick out the worst possible times to get soft, anyway—but I squatted there in the mud and got busy. At last I was off. I began by riding the ridge of mud between the two aforementioned canals, and as my tires had seen so much service that their anti-skid knobs were worn down flush, you can easily imagine some of the acrobatic performances my old tub went through. The nimble chamois that spends his spare time leaping from crag to crag in the Alps would have been hopelessly out classed by that twin of mine.

And still it continued to rain. Occasionally a young river had taken a notion to wander across the road, and I would splash into the channel with a hiss, as the water flew all over my machine. I couldn't wear my goggles, for the rain drops on the glass made it too difficult to see, and it seemed to me that a big amount of the mud thrown up by the front wheel found it way into my eyes. I was getting my endurance run, with interest.

The Clutch a Life-Saver.

My clutch was what saved my life; I don't believe any machine could have gone through those roads without a free engine. I became so expert at making lightning grabs for the clutch handle that I could do it without even looking. There was only one hill that I didn't



"I was so travel-stained that they refused to answer me or open the door."

ride up, and that was hopeless. In spite of all my efforts the machine threw me off when we were half way to the top, and the hill was so steep and the mud so deep that I didn't care to race the head off my motor in attempting to start. I walked beside the machine, managing the clutch with one hand and the throttle with the other, and let the motor do just enough work to pull the outfit up.

My time was nothing to brag of, and I found that ten miles an hour was good traveling for such roads. The motorcycle was soon a sight, for sand and water were splashed over every inch of its surface. The belt suffered most; it was simply soaked with water, and the leather became so soft that hundreds of tiny rock particles were embedded in it. That seriously damaged the front pulley lagging. When I left home the slots were still visible in the screws which held it to the pulley, while after my trip even the screws were ground down until not a sign of the heads was showing.

Of course, since it was absolutely an unexplored country to me, I found it necessary to ask more or less frequently about the road, and you may be sure that by that time I was a pretty tough looking customer, with

the mud all over my face and clothes. In one place the road forked at the foot of a big hill, and I stopped to make inquiries at the nearest house. I knew people were home, for I saw someone through a window, but all my poundings at the door awaked no response. Doubtless they sized me up from within, and were unwilling to take a chance on my character. Finally I gave up, and secured the necessary information at another house.

The rain that afternoon was quite peculiar; it seemed to spread over the region in narrow belts. Several times I nearly escaped from the rain belt, and began to congratulate myself that the worst was over, only to meet another soaking down-pour. It developed into a continuous performance, and once the rain was so bad that it drove me off the road to seek shelter in a friendly barn.

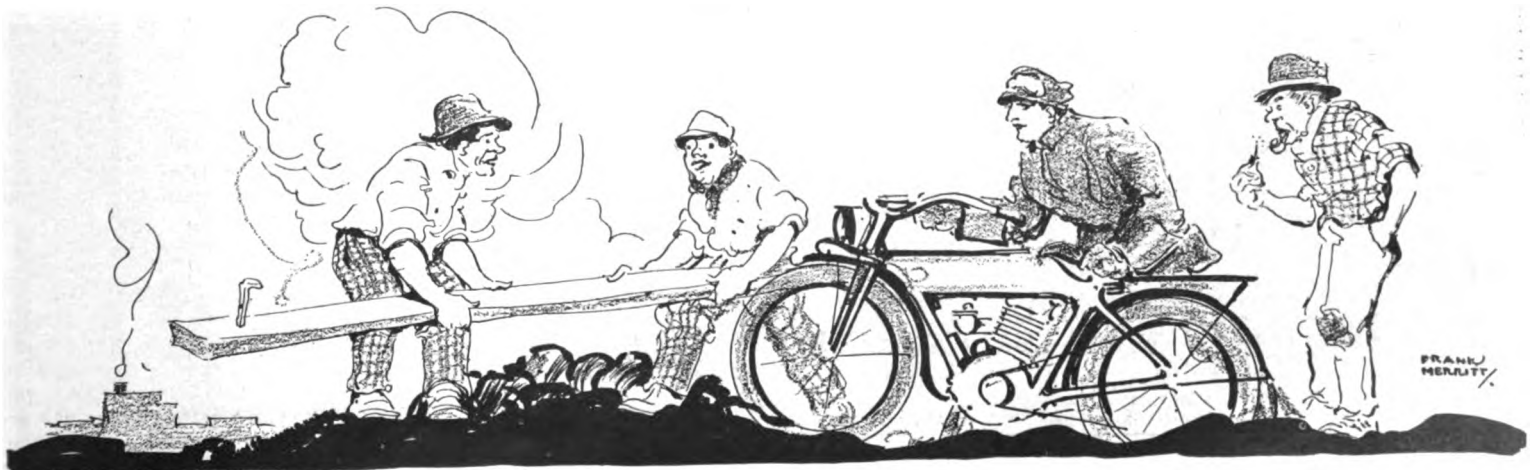
On Macadam at Last.

I knew that when I arrived within eight miles of home I should strike a new macadam road, and the thought of how joyous it would be to drive again over a solid foundation kept my spirits up through the worst of it. So I pounded onwards, skidding from one side of the road to the other, and acquiring a vast amount of valuable experience in mud-plugging. Even at my slow pace I made better time than most automobiles; not one of the four-wheelers passed me going in my direction, while I managed to slip by several.

The worst bit of all came just before I struck the new macadam, for the road was broken up for some distance in preparation for a coat of crushed stone. It was full of holes, and the holes were all full of water. There was considerable auto traffic through that section, and the heavy cars had apparently bumped the bottom right out of many of those holes. I never could tell how deep one was until I struck it.

When I was at last speeding over that rounded, well-drained macadam surface, my troubles indeed seemed to be over, and I opened the throttle to forty-five miles for the pure joy of "hitting it up." My hard luck jinx was still to be reckoned with, however, for when I was yet five miles from home, the back tire went flat again. It was almost dark, and I didn't feel exactly in the mood for fixing a puncture, so I decided to call it a slow leak and try to get home on one pumping up. I did it, but the tire was soft when I finally pushed the machine into its quarters.

The ride after leaving my friends was surely a tough one—forty miles in about four hours—but when it was all over, I felt glad for the experience. In the whole day I had not the slightest suggestion of any mechanical trouble.



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President

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H. N. CONDUCT,
Secretary

THAT there are many desirable forms of competition for motorcycles, aside from those which imply simply the utmost in speed, is a fact that has been slow to sink in on this side of the Atlantic, but it is now being hinted that the season of 1913 will find manufacturers and riders in a receptive mood for something more than the tests involved in saucer-spinning and ordinary road work. Our field can ill afford to sacrifice any of the interest that has been aroused in these branches of the sport—and it is far from the writer's intention to disparage them as breeders of enthusiasm—but the student of conditions will be forced to admit that there are other trials, easily arranged and less costly, from which the American motorcycle at its present stage of development would derive more practical benefit. Our endurance runs and reliability tests have headed us in the right direction, but in the past the personal element in these contests has invariably been enlarged upon at the expense of the motorcycle.

IN an endurance contest, for example, the riders who adhere to the running schedule and finish within the time limit are credited with perfect scores, but seldom if ever is there an official report on the condition of the fittings and motor parts of the machines to which awards are made. The fact that remarkable performances have been given under most trying circumstances simply strengthens the argument that such technical data as is referred to, collected at the close of the test, would be of wide interest and practical value. Now and then a perfect scorer would be called upon to put up with a harsh report relative to the condition of some of his fittings after a long grind, but in doing so he would be helping to pave the way for improvements that would ultimately eliminate the harsh report—or at least temper it considerably. It is interesting to learn that several machines have successfully ploughed through hundreds of miles of mud and clay, but information as to how individual fitments stood up under the strain would make even a wider appeal.

GETTING back to the value of tests other than those which call for extreme speed, it is interesting to note that of late British motorcyclists have been giving considerable attention to non-oiling experiments. That no feature of the motor two-wheeler is deserving of more exhaustive study than the lubricating system goes without saying, and trials to determine the best oiling policy and the most efficient method of lubrication cannot fail of

helpful results. In a recent non-oiling test the rider of an English machine gave his motor half a pumpful of the lubricant and then carefully noted the distance covered and the behavior of his mount as it made the most of its limited oil supply. This is referred to merely by way of proving that there is practically no end to the variety of motorcycle tests, and in nearly every instance it is possible to inject the element of competition.

THAT an economy trial, a hill-climb, a brake test, a non-oiling competition, or any one of a dozen other possible contests open to motorcyclists, will not afford the spectacular features of board-saucering and road racing is obvious, but it would seem that the time is ripe for more serious consideration of practical results by American riders. Let us have the 90-mile an hour whirls on the big bowls, with reasonable precaution exercised, and give us general road work—plenty of it—but let us also have a keen eye open for those less sensational programs which make a practical appeal to the prospective rider, put designers on their mettle and exert a more direct and constructive influence upon machine developments.

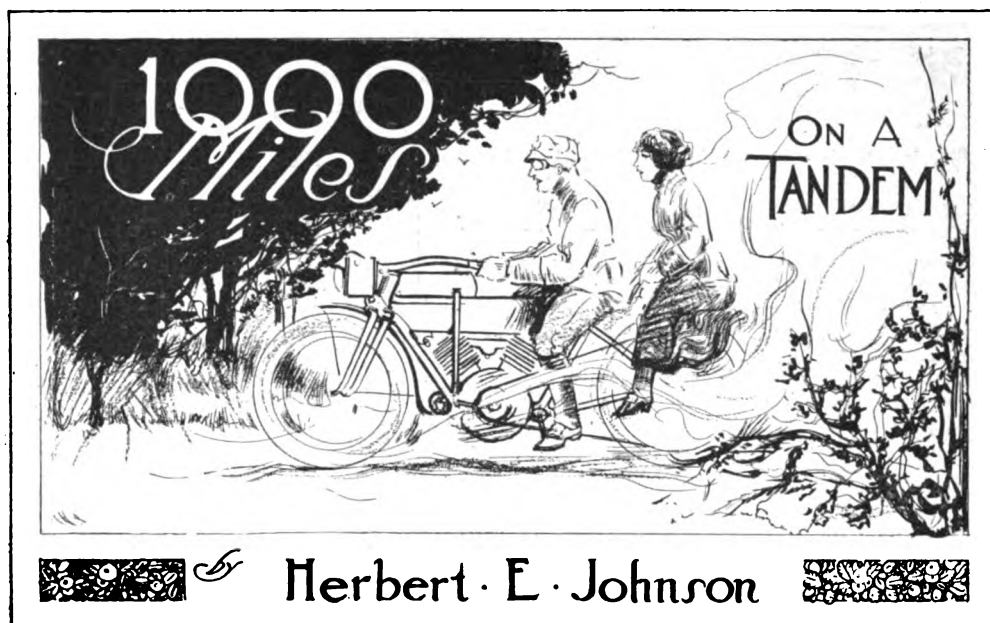
THERE are indications that many speedsters who have been instrumental in developing board-track racing to its present stage will be missing from the big bowls when the 1913 season is opened—due to an influx of young riders who are careless, to put it mildly, in their financial arrangements with track managers—and in this tendency there is a menace which promoters should not be slow to recognize. The veterans assert, and not without justification, that the field is in danger of being over-run with youngsters who are willing to jeopardize their necks for little or nothing, and that experienced racers cannot be expected to accept the uncertain methods of payment thus established. What is more to the point, they do not care to assume the risks incident to competing with unseasoned riders who are drawn into the game primarily through love of excitement.

A SOLUTION of the problem thus presented to board-track promoters is not within the scope of these paragraphs, but that there is a problem, and one of vital import, cannot be denied. If inexperienced young riders are permitted to under-figure the veterans to such an extent that the latter are driven

from the bowls there is certain to be a lowering of racing standards and a day of reckoning. The writer holds no brief for the seasoned campaigner who makes unreasonable demands—financially or otherwise—but he does believe that every racer fit to compete on a saucer track should receive a fair return for his hazardous work. If he is not fitted for such exacting competition he should not be engaged, no matter how cheaply he may rate his services.

HARROWING reports of a recent motorcycle race in Williamsport, Pa., in which one girl rider was fatally injured and another seriously hurt, have moved F. A. M. officials to thankfulness that this contest was not held under a Federation sanction, and that no similar competition can be conducted with the approval of the national body. The F. A. M. states unequivocally that women riders shall not figure in competitive events, and its stand in the premises could not have stronger backing than is involved in the Williamsport affair. From time to time influence has been exerted to have the Federation officials countenance a race for women riders, but always without avail; such contests are invariably held on an outlaw basis. It is regrettable that human lives and the dignity of a sport must occasionally be sacrificed to the frenzied craving of a few promoters for spectacular programs, but it is also reassuring to know that American motorcyclists as a body are set sternly against such practices—and that they will remain so.

IT is on these crisp post-summer days that Nature exerts herself most fascinatingly to entice the motorcyclist away from bare pavements and walled-in streets to the open road and the golden-tinted countryside, and he is an indifferent rider indeed who can ignore the call. An hour in the saddle will now bring any city dweller to districts where each patch of woodland is radiant in the royal toggery of Autumn—but this will not last long. Each moment is precious. Trundle out the faithful mount and make the most of the country roads in your territory, and do it today. Don't bother about a long rigamarole of conventional preparations; just tune up, climb into the saddle and slip away into the big outdoors. *Tempus fugit!*



HERBERT E. JOHNSON, of Latham, N. Y., writes an interesting account of a 1,000-mile motorcycle tour through New York, New Jersey and part of Pennsylvania which he recently made with Mrs. Johnson as a tandem passenger. Although hills and considerable sand were encountered, the machine gave no trouble and the outing proved entirely successful. Mr. Johnson deals with his experiences as follows.

For some time my wife and I had looked forward to the trip I am about to describe, and we were jubilant when the time finally arrived to start. Our equipment consisted of an Indian seven with Simplex tandem attachment and home-made handlebars. We also carried an extra tube for emergency, as well as sundry patches, cotter-pins, nuts and other small parts. Across the handlebars was stretched a piece of webbing that acted as a cradle for our suit-case, the latter being held in place by straps.

We left home on the first day of September and took the Troy-Schenectady route to Troy, proceeding thence to Pittsfield over a fine road. It was the coldest morning of the early fall and threatening clouds hovered over us, but we reached the Wendell Hotel just before rain fell. After stopping over for twenty-four hours, we headed for Springfield, the rain having ceased. The going was bad, but it did not hinder us from enjoying the trip and the beautiful scenery. On the top of Jacob's Ladder a heavy mist enveloped us, and this kept up all the way to Springfield, where it developed into a hard rain. The storm continued until noon of the next day, when the sun peeped out from behind the clouds and we were on our way again. Before leaving, however, we visited the Hendee plant, where we were cordially received. We left Springfield for Hartford and had fine roads with the exception of a bad stretch about a mile out of Long Meadow. Here we had the first real sunshine since leaving home, and the roads continued good through a district of beautiful scenery to Middletown and New Haven, where we spent the night.

A Run Across New Jersey.

The next morning we continued our trip, stopping at Bridgeport, where our good roads

ended. From this place the route was in fearful shape; in some places we were obliged to walk or go into a ditch; but as all things come to an end, so did this road. Pelham Parkway restored to us our former optimism. From New York we crossed the ferry to Fort Lee and took the road via Englewood and Hackensack to Paterson, N. J., where we spent a few days with relatives. Tuesday morning, bright and early, we left Paterson en route to Somerville.

The roads were in good condition until we were just outside the city limits of Newark; here we struck some ruts and met the worst of all motorcycle enemies, Mr. Wire Nail, who delayed us the best part of two hours. This was our first and only puncture. When we arrived in Somerville that night we were very tired and ready for bed. The next morning, after passing through Duke's Park, a very beautiful estate, we set out for Philadelphia. We stopped at several towns along the route and arrived in the Quaker City about 5 p. m. The next few days were spent in Philadelphia, enjoying the good roads, especially those in Fairmount Park.

On the Homeward Trip.

On Friday, September 13, we crossed the Delaware to Camden and followed an excellent road direct to Atlantic City, where we remained a few days sight-seeing. Monday morning found us ready to start northward. We had good roads all the way to Lakewood, where we stopped for dinner. We then pushed on to Point Pleasant and up the coast to Asbury Park. We had expected to spend the night there, but finding good roads and our machine being in fine order, we rode through Seabright to Red Bank and remained there till morning. We got an early start the next day, but had poor roads the entire distance to Perth Amboy. From there to Paterson the going was splendid and we made up for lost time. Rain delayed us several days in Paterson, giving us a chance to rest and see the sights we had missed on the outward trip. Saturday brought clear weather again, and we were glad to take the road.

The going was good almost the entire distance to Newburgh, where we stopped for dinner. The mountains were very beautiful and were quite a relief from the flat country of

southern New Jersey. At Newburgh we crossed the Hudson to Fishkill and thence proceeded northward over excellent roads, through Poughkeepsie and Hudson to Kinderhook. We spent the night at the latter town. On Sunday morning we started the last lap of our trip. Leaving Kinderhook we traveled over four miles of sand to reach the State road. This good road took us direct to Rensselaer, where we crossed the Hudson again to Albany. Our home is only six miles above Albany, and I will leave it to the reader's imagination to guess how soon we were at our front door. Three weeks had elapsed since the start and we had had a most delightful and invigorating trip. Our cyclometer showed 1,000 miles for the outing.

JERSEYITE OFFERS REWARD.

H. RAUER, of 193 Belmont avenue, Haledon, N. J., reports the theft of his 1911 7 h. red Indian. Its equipment consisted of Prest-O-Lite tank, large brass headlight, square tool box on Indian luggage carrier, Brooks saddle; chain idler on right side, extra needle valve on carburetor jet, leather bumper on top of spring fork; cyclometer and watch on handlebars. An Empire tire was fitted on the rear wheel and a G. & J. on the front. Mr. Rauer offers \$50 for the machine's recovery.

CARD SYSTEM SUCCESSFUL.

MOTORCYCLISTS in Marietta, Ohio, are now using the identification card system in their dealings with the local police, and to date it has given satisfaction. When a member of the Marietta club is arrested for any offense, excepting a felony, he produces a card which identifies him as a member in good standing of the organization. This card is accepted as a bond for his appearance in court, the club standing responsible. The system has been operated in a number of large cities for some time past.

FAILED TO RETURN MOUNT

DE GRUCHY & GORRELL, of Columbus, Ohio, dealers in bicycles and motorcycles, report the loss of a Thor IV, painted blue, with license number 809 and engine K725. The machine was rented out to a young man who said he would return it in an hour, but when he had not appeared six hours later the case was reported to the police.

A ONE-PUNCTURE TRIP.

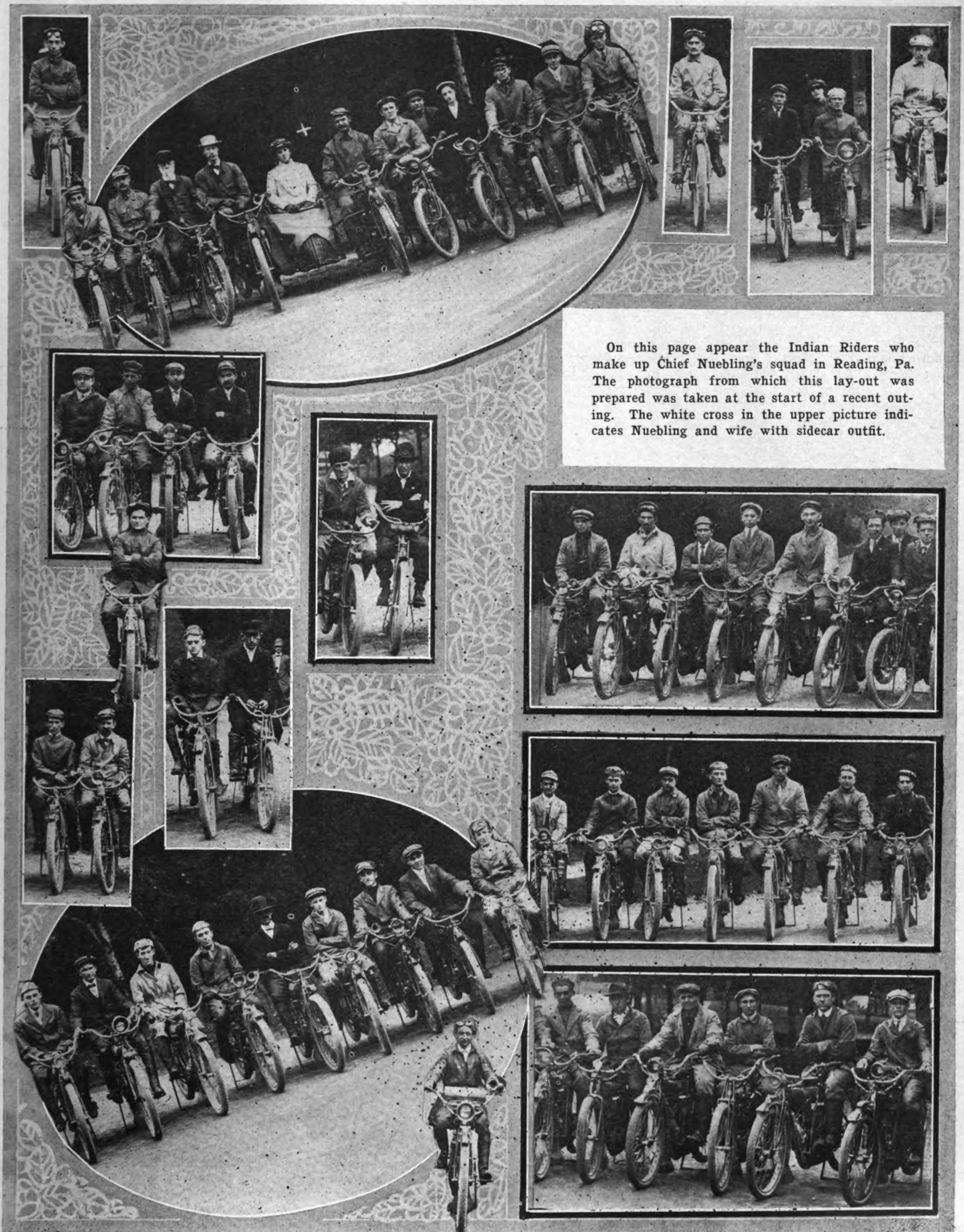
L H. BARKSDALE recently completed a trip to his home in Laurens, S. D., from New Orleans, via Montgomery, Atlanta and Greenville. The distance was 1,800 miles and the trip was made without an accident and with only one puncture.

WOLTERS QUILTS RACING GAME.

AS a result of his recent and only accident on the track, Joe Wolters has decided to quit the racing game. "I'm going to stop," says the speedster, "before it is too late."

BASIL WATSON, of Chicago, was the second motorcyclist on his way to the Pacific coast to report in Phoenix, Ariz., in one week, the other being Nelson L. Moulton, of Kittery, Me.

FRANK ROBINSON, a school commissioner at Coldwater, Mich., has purchased a motorcycle in order to save time on his inspection tours of the schools.



On this page appear the Indian Riders who make up Chief Nuebling's squad in Reading, Pa. The photograph from which this lay-out was prepared was taken at the start of a recent outing. The white cross in the upper picture indicates Nuebling and wife with sidecar outfit.

HOW I TAMED A SECOND-HAND MOUNT

• DWIGHT • B • PANGBURN •

I HAD always wanted a motorcycle and when two or three friends bought machines and allowed me to try them I immediately saw that I could no longer do without one of my own. Still the prices of new machines like those of my friends were too much for me, so when I chanced on a man who wanted to sell one less than a year old and "as good as new" at less than half price, I purchased it at once.

The next morning I had my first trouble. I found the rear tire flat. Taking the tube out I looked it over carefully. There were four patches on it. I could find no leak anywhere so I began to use my head and it occurred to me that the valve might leak. I tested it and found that it leaked badly. There was no other leak and I had had the trouble of taking out the tube all for nothing. A little later the four patches came loose, one at a time, and had to be replaced. On questioning the original owner he said he had put those on shortly before selling the machine to me, and had been in too much of a hurry to wait the proper length of time for the cement to dry before applying the patches.

Solving a Leak Mystery.

The first of these patches sprung a leak after I had had the machine about three days. It was an unusually hot day and I had run at good speed over an unshaded, oiled road for several miles. I was ten miles from home and it was nearly dinner time. Taking out the tube I found a patch was leaking, apparently having become too hot. I took off the patch, which was quite a large one, and found I had no other big enough to take its place, so I had to clean it to use again. I put it on and pumped up. As long as I pumped the tire stayed hard; when I stopped pumping it grew soft. Finally I started to take the tube out again and found another patch leaking. I put a new one on and pumped up again, but with no better luck. By this time the rubber connection on the pump had worn so that most of the air leaked out at the ends instead of going into the tire. I had nothing in my kit to fix it with so I walked 200 yards to the nearest house and got some twine to tie the ends up with. It was a mighty poor substitute, but better than nothing. So nowadays you can't find me without wire in my kit—and I've helped lots of other fellows with it too.

Both these times I had taken the tube out everywhere except at the valve stem, and as it still leaked it at last entered my head that there might be trouble in that little section of tube about six inches long that I couldn't see.

So I fished it out—and found a glass puncture about one-sixteenth of an inch long, just big enough to let the air out as fast as I put it in. It had taken me exactly three hours to get the idea that I might have two leaks at the same time. Ever since that day I have taken the tube out all the way round.

How a Novice Started Trouble.

I had found by comparison that my machine did not ride as easily as those of some of my friends. While riding with one of them I heard him complain that every time he struck a bad bump his saddle "hit bottom." As he weighed 25 pounds more than I and I never hit bottom on his machine, it gave me an idea, and I suggested that we trade the bottom coil springs under our saddles. We examined the springs and mine seemed stiffer, so we made the exchange, after which I rode as easily as anyone and he hit bottom no more.

For a hundred miles everything ran smoothly. No hill was too steep for me, no grade too long, no other machine of my class could touch me on the level. Then I met a friend who wanted a ride. "Just out to the end of this good piece of road, y'know." He had never motored much, but it was only a mile and a half each way, and in a moment of weakness I yielded. My model being behind time I had no clutch. He started with the belt rather loose and I yelled at him to tighten the idler. When he reappeared after some time the engine was smoking like a pile of wet leaves and he wanted to know what was the matter with the old tub, anyway. Said it wouldn't go over 20 miles an hour. He had not tightened the belt and had consequently burned off every thread of the canvas lagging on the pulley, also injuring the belt on the lagging screws.

Attaching Pulley Lagging.

I immediately got some leather belting for pulley lagging. I put a piece of paper around the pulley and marked the 8 screw holes on it. Laying the paper on the leather I cut the holes and counter-sunk them. Then I tried to put the lagging on. I had not reckoned on the fact that the leather was some 50 times thicker than the paper and a lot of it would be taken up in bending, so when I started with two of the holes right the other six were wrongly placed, the worst being nearly $\frac{3}{8}$ inch out of place. Thus I discovered that the only way to put the lagging on right was to put in the screws at one end and then wrap the lagging around the pulley and pound it, preferably with a ball peen hammer, to stretch it and locate the holes for cutting. A patent

buckle strap put around the lagging and pulled tight was a great aid in holding it in place while putting in the screws.

The morning after my lagging was fixed I started the engine and found that instead of running smoothly as it had done before, it would fire four times and miss twice, repeating this sequence exactly. By testing I found the magneto was producing a spark just 4 times out of every 6 times it ought to. Then I began to examine it. I cleaned it as well as I could, including the carbon brushes. It was no better. I decided to take it to the agent. He and two or three other motorcycle men saw it and worked over it during the day. When they had finished it was firing 3 times out of 6 and missing the other 3, and would only just carry me on the level. I started for home, and on the way it got to sparking only 2 times out of 6 and would no longer carry me by itself, so I had to pedal to help it, fortunately only a short way.

Doctoring a Cranky Magneto.

Forthwith I wrote to the makers of the magneto, asking to have their trouble man tell me what was the matter and explaining the situation in detail. They replied that they had carefully noted my letter and that if I would send the magneto to them by prepaid express they would endeavor to tell me how much it would cost to have it fixed. I don't know whether they knew what the trouble was, but at any rate they gave me no information—not even an instruction booklet which I asked for.

Not relishing such treatment from the manufacturers I determined to find the trouble myself. My first step was to examine another machine of the same make as mine and compare the magnetos carefully. Having done this I saw that my platinum points were set too far apart. I moved them closer together—they were already clean—and the motor ran perfectly. To use the proper expression the magneto had been "breaking too high," but the makers couldn't seem to guess it. Since then I have had the same trouble again by having one of the points work loose, and it has always yielded to the same treatment; setting the points closer together.

Learning a Timing Lesson.

During the work with the magneto I had taken the cover off the gears and started the machine that way. The idle gear quickly jumped out and spoiled the timing. Instructions for timing usually say to put a wire through the priming cock at the top of the cylinder and find when the piston is at the top end of its stroke. At least they always

tell how to set the magneto after one has determined when the piston is at the top of the compression stroke. But my cylinder has no priming cock and the head and walls are one casting, so I couldn't find what I wanted by taking the head off. Besides I had no instruction book to go by.

Finally I thought out the system that follows, for timing the spark without taking the engine apart in any way or sticking any wires in it. This system works equally well with singles or twins, and depends on the fact that the exhaust valve closes at the exact instant when the suction stroke begins. That this must be so is evident, since if the exhaust valve were to close earlier there would be some compression, which would both slow up the engine and delay suction, causing a scant charge to be drawn in; and if the exhaust valve were to close later some of the waste gases from the exhaust pipe would be drawn back into the cylinder.

But the suction stroke begins at the moment that the piston starts away from its highest position in the cylinder. Therefore at the moment when the exhaust valve is just closing the piston is just at the top of the cylinder.

A Successful System.

Bearing these facts in mind I proceeded as follows. I turned the engine over until I saw by the downward motion of the valve stem that the exhaust valve was just closing. Next I made a chalk mark on the pulley rim, at the top of the pulley to correspond with the piston, which I knew was at the top of the cylinder. I knew also that the engine must make its suction and compression strokes before it was ready to fire, so I released the compression and turned it one complete revolution, until the chalk mark was at the top again. I was aware that the limit of advanced spark is to have the spark take place about one-fourteenth of a turn before the piston reached the top of the cylinder; that is, to have the spark 25 degs. ahead of the piston and take place when the piston is thirteen-fourteenths of the way up the compression stroke. So I set the spark control at full advance, made another chalk mark on the pulley 25 degs., or about one-fourteenth of the circumference, ahead of the other mark in the direction the engine turns normally (shown in Fig. 1) and then turning the pulley back so this second mark was at the top (shown in Fig. 2), I replaced the gears in such a position that the platinum points on the magneto were just parting. On trying the engine I found that it ran very well, but would not run on full advance spark satisfactorily. Moving the gear just one cog so as to retard the

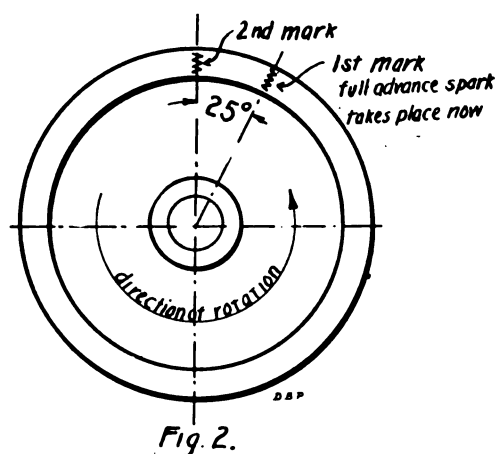


Fig. 2.

spark fixed this and I have never had to change the timing.

An Excellent Service Record.

A story of troubles is hardly complete without mention of carburetor trouble. When I got the machine it was running well. I made careful note of the settings of the air and gas valves. The only carburetor trouble I have had in thousands of miles of riding was once when the adjustment was changed without my knowing it. The trouble was fixed in five minutes by turning both adjustments down tight and returning to the original position. This experience has led me to believe that a great part of carburetor trouble is due to "tinkeritis." The only care I have ever given mine is to keep it clean on the outside, especially at the air valve, and clean on the inside by straining all my gasoline.

Perusal of the foregoing article may lead one to the impression that I have never had anything but trouble, but just the reverse is true. That I have never had anything but service is a more truthful statement of the case. All these troubles described occurred during the first 300 miles of riding. Since then I have not had to stop on the road for trouble of any kind, including tire trouble, any oftener on the average than once in 500 miles. Considering that I have never replaced any parts, not even a spring or valve, this seems to me like a good record.

FOR GAS ENGINE USERS.

THE Norman W. Henley Publishing Co., of 132 Nassau and 15 Beekman street, New York City, has just issued a new book under the title "Gasoline Engines, Their Operation, Use and Care." The book, which sells for \$1.50, is well printed and contains much information of general value to the user of a gasoline engine. It describes the gasoline engine; its construction and operation; tells how to install it; how to select it; how to use it and how to remedy the troubles encountered.

WANTS MORE MOTORCYCLES.

BALTIMORE, Md.—Street Cleaning Commissioner Larkins has requested the Board of Estimate to grant him \$700 for new motorcycles. His department has several motorcycles in use and they have shown such economy in the conduct of his work that he wants more. The board has become interested in his proposition and it is likely that he will be given the money.

THE Philippine Islands are said to have 360 good motorcycling days in a year.

A MINNESOTA PARTY.

SPEAKING of parties—and most folks are these days—there is a squad of motorcyclists in St. Charles, Minn., traveling under the name of the "Single Track Gasoline Roller Motorcycle Party," and its riders live up to all their opportunities. Doctor F. C. Dolder heads the party and transacts business under the title of Boss of Bosses. The other officials of the squad are also "Bosses," the novel staff being made up as follows: Doctor F. C. Dolder, boss of bosses; Ben Schock, big boss artist; J. A. Anderson, big boss packer; August Bohks, big road boss; Martin Hanson, big shop boss; Rev. Shoewe, big pilot boss; Ben Smith, big Indian boss; J. J. Kadletz, big country boss; E. Englebart, big wrecking crew boss, and Logan Rockwell, big insurance boss.

THE NORTHERN PACIFIC COAST.

RIDERS who have toured the Northern Pacific coast of late report that north of San Francisco the coast affords but few beaches that are easily accessible to motorcyclists. Immediately south of the Columbia River, along the Oregon coast, several stretches of sandy beach are to be found, and the same holds true north of the Columbia River, along the Washington coast. A new road has just been opened from Aberdeen to Cohasset Beach, which connects the Washington beaches with the Puget Sound country, and this section has been explored by a large number of motorcyclists. Cohasset beach is the longest stretch of continuous beach fit for riding on the northern Pacific coast.

SHOWED SHORT GRASS PICTURES.

LAST summer's Short Grass tour was the subject of a recent illustrated lecture given by M. E. Harding and Irwin Keller, two motorcyclists who completed the tour and who took more than 100 pictures. The lecture was given for members of the Topeka (Kan.) Motorcycle Club and other Topekans interested in motorcycling.

WINNER IN DENVER.

MOTORCYCLES and sidecars figured in a parade incident to the annual Mountain and Plain Festival which was held recently at Denver, Col., and the Indian outfit, shown in the accompanying photograph, carried off first prize in its class. The rider of the machine is Arthur Stevens, a salesman for the Indian branch in Denver, and the sidecar is occupied by Mrs. Stevens. The motorcycle section of the parade created an excellent impression and brought the motor two-wheeler into a position of prominence which it had not previously attained in Denver.

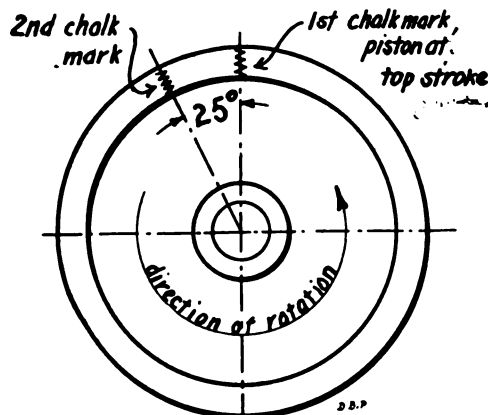


Fig 1.

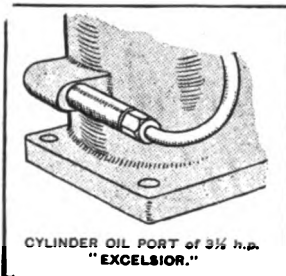
ENGLISH NOTES "BRITISHER"

Legal Bar Against Open Mufflers Causes Trouble for British Manufacturers—A Few of the Latest Refinements—Leading Features of 1913 Models—Armstrong Three-Speed Control—The Wall Auto Wheel, An Ingenious Device.

IN contrasting the performances of Triumph and your Indian, in the Scottish trials, I mentioned too curtly that the Triumph trio did not shine on the hills. In fairness to our trade, I ought to have made it quite clear that whereas the Indian trio were a trade entry of three 7 h. two-speeders, with one man up, the Triumph trio consisted of three self-entered amateurs, one riding a single-gear solo $3\frac{1}{2}$ h. and another pulling his fiancée in a sidecar with a $3\frac{1}{2}$ h. three-speeder. Hence the Indian team were bound to lick them on hills. All in all, the machines gave most satisfactory performances.

A Lubrication Refinement.

WE find that when a high-efficiency motor is worked really hard the slight film of oil flung on the cylinder walls by the fly-wheels is rapidly scorched into smoke. This especially applies to mile spring hill-climbs with very high compression engines, or too prolonged work with a $3\frac{1}{2}$ h. side-car outfit on the 10 to 1 ratio of a three-speed hub. As a consequence some designers who employ pump or drip oiling are taking a special oil-lead to the cylinder walls. The sketch shows how this oil lead is attached to the cylinder of the British Excelsior machine. Inside the cylinder, the piston dips—at the bottom of each stroke—into a circular trough formed round the crankcase cover, which is always full of oil.



Spoiling a Machine's Appearance.

IT is quite plain that our makers as a class are sacrificing beauty to efficiency. The demand for a weatherproof transmission is leading to the general adoption of chain cases. Now, as the cut of many an up-to-date machine indicates at a glance, the old handsome outlines, so laboriously attained, are jettisoned when you slop three huge chain cases onto an otherwise pretty and effective design. You have to protect a magneto chain, a front engine chain, and a back wheel chain. Each normally implies a bulbous, lopsided and generally repulsive blob of aluminum sheeting, and the result may be weatherproof, but looks ghastly. The Lea-Francis people have surmounted the hoodoo as neatly as any actual design I know. They mount their magneto half way between the engine and the

countershaft, and drive it by chain off the crank-shaft, instead of off the cam-shaft, so that its chain lies within the front engine chain case, so reducing the number of chain cases by one. They incorporate a ratio reducer in their gear box, which permits the back wheel chain to have level sprockets, and so dodge the usual ovaloid excrescences. But even thus I notice they cutely had their new model photographed for publication minus its front chain case, which spoils its looks.

The Problem to be Solved.

YOU have to use a large engine sprocket, with plenty of teeth, or wear will be excessive; you have to get a 50 per cent. reduction on the front chain, or the gears will run too fast; and if the public wants this oval running chain fully encased, an ugly cover is next to inevitable. Hence a well-known technical writer suggests that the trade might do well to experiment with an enclosed shaft drive to the countershaft, as the primary unit of both chain drives, and belt-cum-chain drives. It remains to be seen whether any designers will adopt the suggestion. But it certainly offers the chance of a presentable weather-proof transmission, and with adjustments for the bearings and the meshing it should wear at least as well as a front chain.

Open Mufflers Barred.

OUR Local Government Board has at last absolutely forbidden the use of the open muffler. The wording of the new regulations is rather curious, and it is evident that excessive noise will be the basis of the prosecu-

tions which are sure to follow. It is now illegal to ride in Great Britain or Ireland a machine which affords any outlet to the gases prior to their entering a muffler or expansion chamber. In addition we are prevented from running the exhaust gas down a pipe into a sealed muffler devoid of baffle-plates, and then out into the air, for a further regulation penalizes a noisy machine, irrespective of its constructional details. These rules will make the trade exceedingly busy, as some of our best machines cannot be run long distances in hot weather unless the muffler cutout is open at present.



An English Type of Front Wheel Stand.

Frontwheel Stand.

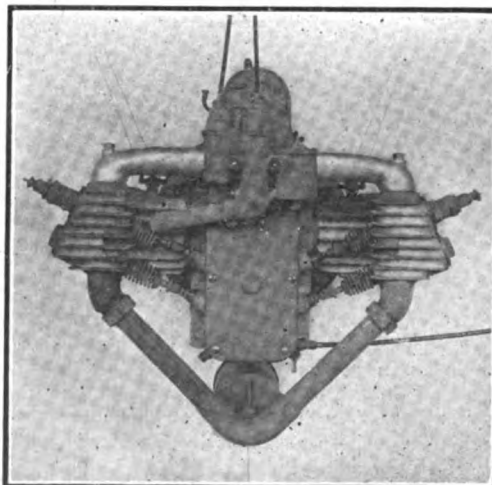
ALL high-class British machines are now provided with frontwheel stands, designed to facilitate repair of the front tire. The cut shows a typical example. The legs work on stub spindles brazed to rear extensions of the fork tips; a shoulder on each lug prevents the stand working more than a degree or so forward of the vertical, and a clip on the tail of the mudguard holds the stand securely, when it is out of use.

Manufacturers in Trouble.

SOME of our manufacturers have already prepared large stocks of 1913 mufflers which are now illegal, and they are simmering with helpless indignation. The general opinion amongst expert roadmen is that danger to the public has been vastly increased for a motor-bike is so small that a pedestrian does not readily sight it, and thousands of accidents have doubtless been averted by our engines making a reasonable noise.

Our Tire and Belt Drives.

CAREFUL official tests of specially entered belts and tires were incorporated in the recent 1,000 miles endurance run, and the judges have issued a portentous report, in which a very little wool and a deal of wadding figure. Entries were not representative in either case, and the absence of comparative chain tests would in any case have robbed the belt tests of much interest. I may briefly sum up the results by saying that rubber belts beat

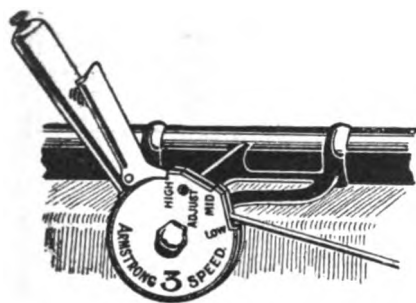


Douglas Motor, of the Type that Won the 1912 Tourist Trophy.

leather belts all ends up; that although manufacturers often sell their $3\frac{1}{2}$ h. machines with $\frac{3}{8}$ -inch and even with $\frac{3}{4}$ -inch belts, yet for trial purposes practically everybody used 1-inch belts, and these large section belts mostly emerged with fair credit; that the tire prize was won by a set of 3-inch cord tires, fitted to a side-car outfit, which were in literally new condition after 1,000 miles of bad roads; that many sets of $2\frac{1}{4}$ -inch tires came through superbly, but that in most cases the treads fitted to the under casing were heavier than are supplied at catalogue price terms from manufacturers' lists of complete machines. The oddity of the trial was that several tires grew steadily heavier in wear, showing that some types of cover are spongy and improperly waterproofed; nothing but absorption of water could account for this increase in weight, as the riders were careful to extract grit, and the tires were washed and rubbed before submission to the judges.

A Three-Speed Gear Control.

THE next cut shows the simple lever and quadrant utilized for controlling our epicyclic hubs. The sketch practically explains itself. There are three notches for the three gear positions, and the hole is intended for



adjustment purposes. The movement of the internal control bar of the hub is extremely short, and the tiniest wear upsets its operation. To adjust the hub, the short screw shown in the head of the lever is inserted through the hole in the quadrant, and the screw-link of the external control rod is then adjusted until the wheel spins free. The control is then correct. Notice the sturdy lugs, brazed to the top tube of the frame, which carry the lever and quadrant.

Leading 1913 Features.

A NUMBER of next season's models are now on exhibition to agents and journalists, and a few leading features of development can be identified with certainty, as follows:

1. The "combined drive" is gaining ground rapidly against belt and chain drives. In every instance the primary item of these twostep transmissions consists of a chain from the engine to the bottom bracket countershaft; the sprockets usually afford fifty per cent. gear reduction, and the engine sprocket embodies a slipping device or spring cushion; the chain is fully encased in a light aluminum cover, dust and waterproof. On the countershaft, which may or may not form part of a gearbox, is mounted a large metal belt pulley, varying from 6 inches to 8 inches in diameter; the final drive from this pulley to the rear belt rim is, of course, by belt. If there is no gearbox on the countershaft, the rear hub contains an epicyclic gear, generally a three-speeder, but in isolated cases a two-speeder.

Variable Gears Paramount.

2. Variable gears are literally universal. The three-speed countershaft gear, whether of the sliding or epicyclic type, is represented by very few examples, unexpected difficulties having hampered the designers; a strong, light gear of this design is not easily arrived at, but most engineers are working in this direction for their ultimate ideal. At the moment the most popular gear is the three-speed epicyclic hub, embodying a multiple disc free engine clutch. The original design has largely been discarded, and the popular types of three-speed hub drive solid on their top ratio, attain the bottom gear through the reduction of two pinion trains, and permit of the engine being started with the back wheel on the ground. Kick starters are fitted in preference to pedalling gears.

3. The decompressor is a popular fitment on the best engines; it greatly reduces the amount of energy required to operate a kick starter.

4. Sliding two-speed countershaft gearboxes are fairly numerous, but figure chiefly on machines sold with an eye glued to the side-car market. In this case the drive is usually by chain throughout.

Other 1913 Details.

5. Detachable wheels, on the lines recently illustrated in this department, are likely to be standardized in the near future, though many firms have not yet decided whether to evade the patents, or to pay royalty.

6. Weatherproof finish is growing popular, though it is not yet consistently applied. Very few machines will be "all black"; but the number of plated parts is being sternly cut down, and accessories, such as lamps and horns, are being blacked.

7. The $2\frac{3}{4}$ h. engine, in conjunction with a variable gear, is being turned out in very large numbers, and will be a very serious competitor with the $3\frac{1}{2}$ h. types. Many firms do not trouble to list models exceeding 350cc. engine capacity.

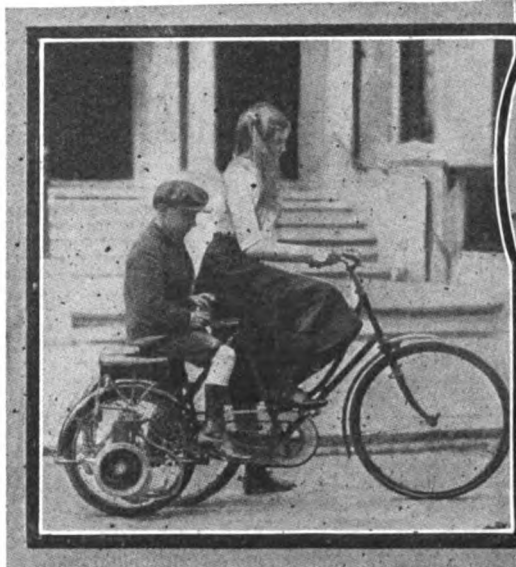
8. Automatic and semi-automatic carburetors are gaining ground. Tap-twiddling is abhorrent to the unmechanical type of customer who rides for the sake of cheap locomotion rather than for sport. At present the genuinely automatic vaporizer is less popular than the type on which the air lever is only used for starting purposes, and flung wide open as soon as the engine fires.

The Wall Auto-Wheel.

FOR years past British motorcycle engineers have been trying to produce some sort of gasoline jigger which could fill the bill for the man who has only fifty dollars or so to expend. The only attempt which achieved any success in the past hailed from Switzerland, the well known Motosacoche, or "motor in a toolbag," produced by the famous Dufax brothers at Geneva. The Dufax Freres have long since abandoned their original ideals, and now confine their attention to aeroplane and powerboat engines, and to a lightweight $2\frac{3}{4}$ h. machine, with variable gear, built on full roadster lines throughout. The gap they have left in supply has been filled by an Englishman named Wall, on rather novel lines. Instead of clipping engine tanks, beltdrum, etc., within the frame of a pushbike, he attaches a ballbearing castor-bracket to the rear forks and chainstays, and from this bracket he trails what he calls an "autowheel".

Details of the Auto-Wheel.

The autowheel weighs 34 lbs. complete, and has a fourstroke engine of 52mm. bore x 54 mm stroke, with miniature magneto, and automatic carbureter. The engine is mounted on the outer of the two horizontal tubes which encircle the autowheel, and drives the hub of the autowheel by chain. A lubricant reservoir is mounted on the back of the crankcase, and feeds it on the canary fountain principle; the gasoline tank is mounted on the top of the autowheel's mudguard. An external flywheel of light weight but large diameter steadies the engine. The controls consist of two levers, valve-lifter and throttle, both mounted on one clip, which is easily attached to the handlebar of the pushbike, and operate the vital parts of the autowheel by means of flexible wires. The attachment has been undergoing road tests for two years past, and the initial difficulties seem to have been adequately surmounted. The 34 pound wheel appears to have all the roadgrip essential to propelling its light load. It can drive a 140 pound rider, on a 35 pound pushbike at twenty miles an hour; greater speeds would occasion excessive vibration with a light machine on small tires. Its hill-climbing capacity is extraordinary.



Two Views of the New Wall "Auto-wheel," One Showing It Driving a Bicycle with Two Passengers.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



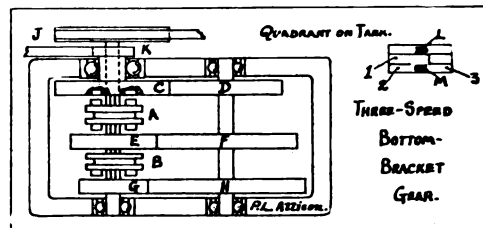
CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.
6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.
7. At least one dollar will be paid for every suggestion published.
8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

THREE-SPEED GEAR.

A THREE-SPEED bottom-bracket or counter-shaft-mounted gear, with selective control is suggested as satisfactory for use on passenger and solo mounts. The chain from the motor sprocket leads to the clutch body J, on which is mounted a sprocket. The clutch shaft is prolonged through the gear box and is squared. two sliders with pin-teeth (A and

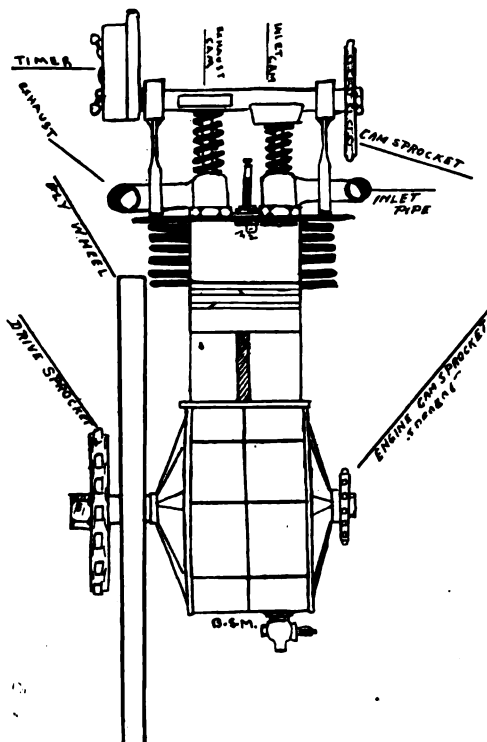


UNIT POWER PLANT.

THE crankcase in this unit power plant houses the two-speed gear and clutch as well as the flywheel, crank and crank-arm. F is the crank-pin, G the single flywheel, and H the gear driving the valve train. On the extension of the crankshaft is keyed a set of gears A and C, which are in constant mesh respectively with gears B and D on the countershaft. A clutch or other device J enables either of the gears B or D to be clutched to the countershaft and thus drive the machine by a chain over sprocket K. The high speed is through gears C and D, while the low speed is through A and B. Contributed by C. W. Bergman, Alpine, Mich.

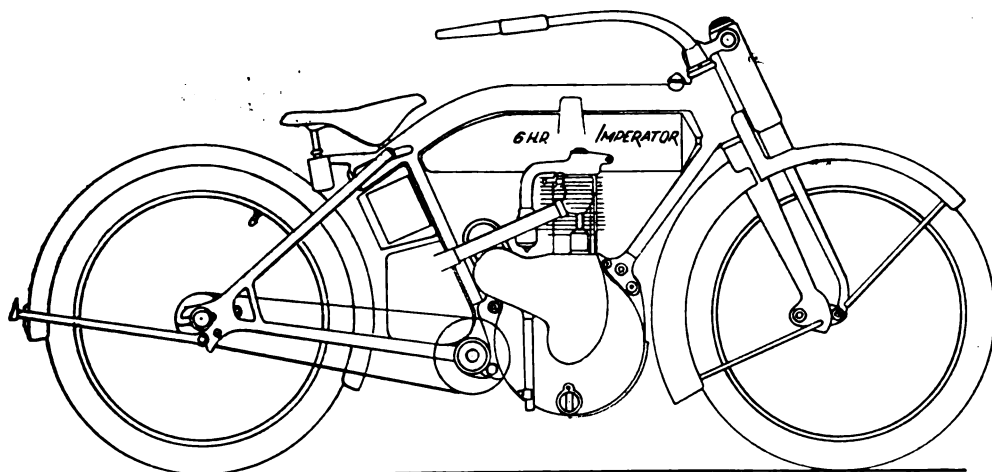
OVERHEAD VALVE LIGHTWEIGHT.

THIS is a 2¾-inch bore and stroke motor with overhead valves actuated by an overhead cam-shaft driven by chain and sprockets from the main shaft. There is an outside flywheel, and the drive sprocket is on an extension of the flywheel shaft. The timer, for battery ignition, is fitted on the end of the cam-shaft. From the drive sprocket a chain runs forward to a counter-shaft, the final drive being by V-belt. The shape of the frame and tanks is distinctive, as is the spring fork. Contributed by B. S. Mackernan, Chicago, Ill.



Overhead Valve Lightweight.

B) being mounted on this squared portion. Loose on this shaft are gears C, E and G. Meshing with these are gears D, F and H, which are fixed on a countershaft. To C is attached a sleeve which surrounds the clutch shaft and carries the final drive sprocket K on its outer end. Each gear on the clutch shaft is pierced with holes to accommodate the pin teeth on their respective slider. Thus slider A has its teeth entering into gears C and C, while slider B has its pin-teeth fitting into G. The holes are shown in the section of gear C. For the high speed, A is moved so that its teeth engage with gear C. The drive is direct from J to K, the shafts being locked together. For the second speed, slider A is moved to engage gear E; the drive is through clutch shaft, gear E, gear F, gear D and gear C to sprocket K. For the low speed, slider A is in neutral, and B is engaged with gear C. The drive is from clutch shaft through gears G, H, D and C to the sprocket K. All gears not engaged on the clutch shaft run idly. The ratios are: High, 3:1; second, 5:1; low, 7:1. The gear change and clutch levers are mounted within a sector of the selective type on the frame of the motorcycle. The clutch lever is at L and the gear change lever at M. When M is moved into slot 1 the low gear is engaged, and when placed in slots 2 and 3 the second and high are respectively engaged. Contributed by Phillip L. Allison, Burson, Cal.



Improved Motorcycle.

THIS embodies a tank-frame construction. The gasoline tank has balanced pillar apertures, one for the filler and the other for the garage, on each side. The tool box is in the usual rear position and has a place for each tool. The muffler is of special shape and located in rear of the seat mast. The rear construction rocks about the crank-hanger, the springs being mounted in the upper frame. The long inlet pipe is another distinctive feature. Contributed by Harold Shoemaker, Schenectady, N. Y.

FISK CO. REINCORPORATED.

BOSTON, October 24.—The Fisk Rubber Company, of Chicopee, which was incorporated under the laws of Delaware, has been reincorporated under the laws of Massachusetts with a capitalization of \$10,000,000, consisting of 50,000 shares of preferred and 50,000 shares of common stock at a par value of \$100. The preferred stock is 7 per cent. cumulative to be given \$100 in case of liquidation and \$115 if redeemed. The incorporators are Harry T. Dunn, Harry G. Fisk and John C. Cole.

DIAMOND CHANGES.

E. B. HUYLAR has resigned as manager of the Milwaukee (Wis.) branch of the Diamond Rubber Company, 132 Oneida street, and is succeeded by R. W. Smith, who comes from Indianapolis, Ind. A. G. Laughner is traveling representative in Wisconsin, with headquarters at the Milwaukee branch.

NEW POPE STRUCTURE.

THE Pope Manufacturing Company, Hartford, Conn., is completing plans for the construction of a four-story factory building, which is to be devoted to the production of a line of lower priced cars. It is said that this structure will double the capacity of the plant.

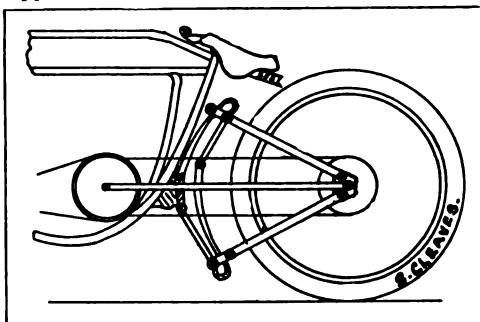
IS THIS A RECORD?

FAY YOUNG, of Rockford, Ill., claims to have run his motorcycle 18,000 miles without having spent a cent on the motor or having taken it apart. He has never replaced his front tire.

A MOTORCYCLE club was recently organized at Oceanside, Long Island, with 14 charter members. Clubrooms have been secured and Secretary Kramer, 153 School street, will be glad to hear from any riders caring to join.

Spring Frame.

A COACH-SPRING type of rear frame which provides, it is claimed, a rigid support is shown here. The central leaf of the spring is continuous and forms a scroll at each end, the short leaves being clamped on opposite sides. A 4-inch lift of the rear wheel



causes only a 2-inch rise on the springs. A small tank for cylinder oil should be placed below the countershaft to lower the center of gravity. Contributed by S. Cleaves, Cambridge, Mass.

RODE FOR CHICKEN DINNER.

ABOUT sixty motorcyclists, including eight women riders, of Reading, Pa., recently made a run to Earlville, where they enjoyed a chicken and waffle dinner. After the dinner they rode to Boyertown and then returned to Reading.

Motorcyclists of Inman, Kan., are organizing a club and will affiliate with the F. A. M.

ON LONG ISLAND ROADS.

THE necessity for the Brooklyn (N. Y.) riders to navigate through the congested downtown section of New York City, which detracted to a great extent from the pleasure of an up-state trip, has been overcome by the recent improvements which have been made to a number of Long Island's highways, thereby enabling the rider to make interesting trips over good roads on Long Island. Hoffman Boulevard, which lies in a pretty section where one need not fear heavy traffic, has recently been repaired and now affords excellent riding. Another attractive ride is through Cooper street to Trotting Course Lane and thence west to Hoffman Boulevard; or one might go via Jamaica avenue to Forest Park and then along Trotting Course Lane and continuing on Hoffman Boulevard.

THOMPSON TO MAKE CHANGE.

GROVER C. THOMPSON, who for six years represented the Electric Welding Products Company, of Cleveland, Ohio, in the New England states, and who for the last three years has been the company's representative in Ohio and Indiana, will soon take up the duties of manager of sales for the Michigan Electric Welding Company. This firm is contemplating an entrance into the motorcycle field. The company will not exhibit at the coming shows, but will be well represented.

A STOLEN MACHINE.

A REWARD of \$25 is offered for the recovery of a 1912, 6 h. Excelsior twin, belonging to W. T. Metzger, 1767 West Thirty-second street, Cleveland, Ohio. The machine was stolen recently. It has the standard gray finish, license No. 117, motor No. 26,400, tandem seat, Goodyear studded tires and belt drive.

A BULLETIN FROM PULS

GEORGE J. PULS, of the Harley-Davidson road staff, bulletins the factory that he has closed with C. L. Wilkins, 12 West High street, Springfield, Ohio, to handle the H-D products exclusively for 1913. Wilkins was formerly a member of the firm of Wilkins & Grove, and has had wide experience in the motorcycle and bicycle business.

Motorcyclists in Iowa City, Ia., have formed a permanent club.



TOLEDO TOURISTS

THE riders shown in the photograph are members of a touring club of Toledo, Ohio, ready for one of their regular Sunday

club rides. There are excellent roads running out of Toledo for many miles in all directions, and a number of highly enjoyable tours were made by this group during the season now closing.

QUESTIONS and ANSWERS

IN considering the statement of those who participated in contest No. 7, explaining "the operation of the inlet and exhaust valves," it was noted that quite a few contributors sacrificed their chances to capture the prizes by taking too much for granted. There was a tendency to assume that all riders know the valves open at certain times and close at others, and while these operations are too obvious to require specification ordinarily a reference to them was needed to complete a winning statement in this contest. Attention is called to this condition so that contributors will not ignore details in future letters. Several writers took up valve operations very thoroughly, but only for a certain method of arrangement, thus offsetting the value of their explanations. One of the best letters was unsigned and without an address, so that it could not be judged.

The first prize in this contest is awarded to Harry C. Sundgard, 4535 Mulberry street, Frankford (Philadelphia), Pa., and the second award goes to D. J. McLaughlin, 17 Elm street, Ilion, N. Y. Two others receive honorable mention.

The series of contests now being conducted in this department will close with the issue of December 26, and announcement of the final winners will be made in the next issue, that of January 9. Contributors should submit answers to each question as soon as possible after its first appearance so that the work of judging and awarding prizes may be facilitated. All answers, and communications referring to the contests, should be addressed to: "Editor Questions and Answers, Motorcycle Illustrated, 51 Chambers street, New York."

Below are given question No. 8, that for which answers are now being received, and the new question, No. 9. Prize winners for No. 8 will be given in the next issue.

Question No. 8. Describe the action of a three-port, two-stroke motor.

Question No. 9. Which is the most desirable location for the clutch on a belt-driven machine?

FRANK

MERRITT

OPERATION OF VALVES.

(Question No. 7.)

THE first prize in this contest, Question No. 7, has been awarded to Harry C. Sundgard, of Frankford, Pa., whose contribution was as follows:

"The functions of the exhaust and inlet valves are explained by their names. The inlet valve opens to admit the live gas to the cylinder, and the exhaust valve opens to permit the escape of the burnt charge. The cycle of operation is as follows: Starting with the suction stroke, the inlet valve opens as the piston moves down and the live gas is drawn in from the carbureter. When the piston starts up on the compression stroke the inlet valve closes and the charge is compressed. At or near the end of this stroke the charge is fired and under the force of the expanding gases the piston moves down on the power stroke. At the end the exhaust valve opens and the piston, moving up, expels the burnt gas.

"Inlet valves are of two varieties—automatic and positive. The automatic valve opens under the force of suction created by the piston, and closes the instant there is any compression in the cylinder. It is held on its seat by a light spring and opens very easily. The positive variety is opened and closed by means of a cam and push rod, and works either with a direct thrust or through a rocker arm. The cam is keyed to a shaft which is geared to the crank shaft and revolves at one-half crank shaft speed. This cam is so designed as to open and close the valve at the proper times.

"The exhaust valve is always operated by a cam and push rod, the cam being arranged as for the inlet valve. Automatic exhaust valves are out of the question for obvious reasons. In actual practice the inlet valve is timed to open at dead centre and closes at a few degrees past centre. Engineers claim that there is suction even after the piston has started on the compression stroke and the valve is left open to get the benefit of this suction. The exhaust valve is timed to open several degrees before dead centre on the power stroke, in order to get rid of the burnt gases as quickly as possible, and closes at dead centre on the up stroke."

Second Prize.

To D. J. McLaughlin, of Ilion, N. Y., the second prize has been awarded. His answer is as follows:

"Inlet and exhaust valves are used on four-stroke motors. The exhaust valves are operated by gears—that is, mechanically—and this applies to the inlets, unless of the automatic type. In an automatic inlet valve, the suction created by the piston moving downward in the cylinder opens the valve and there is no gearing, a light spring closing it when the suction ceases. The operation of the inlet and exhaust valves are as follows: When the piston starts down on the suction stroke, the inlet valve is opened by a cam driven from the motor shaft at one-half the speed of that shaft. The cam acts on the valve through a tappet or other connection and lifts it from its seat. A charge of mixture is thus allowed to be drawn into the cylinder. The inlet

valve is held open until the piston starts up on the compression stroke, when it remains closed through the other three strokes: compression, firing and exhaust. The exhaust valve is opened by similar devices (cam, tappet, etc.) just before the power or firing stroke is completed and is allowed to close by its spring just before the piston starts to come down on the next admission or suction stroke. Both inlet and exhaust valves are fitted with springs which keep them on their seats when not operated by the cams and gearing."

Honorable Mention.

HONORABLE mention is given to the answers of A. F. Clement, of Mansfield, La., and of George M. Johnson, of 366 Whalley Ave., New Haven, Conn. Clement's answer is here given.

"Inlet valves are of two kinds, automatic and mechanical. In the automatic, the outward stroke of the piston creates a vacuum in the cylinder; this suction draws the valve open and draws a charge into the cylinder. When the piston reaches the bottom of its stroke, the suction ceases, and a spring on the valve draws it to its seat and keeps it there until another suction stroke opens it.

"The exhaust valve is always mechanically operated, and the principle of the mechanical inlet and the exhaust is the same: the valve is operated by a cam on the secondary or half-time shaft; this shaft is run by a two-to-one gear from the crank shaft. The valve opens at the end of the power stroke and closes at the beginning of the suction stroke.

"The nose of the cam on the secondary shaft comes in contact with the push rod and raises it; the top of the push rod comes in contact with the bottom of the valve stem and raises the valve. As soon as the nose of the cam has passed from under the push rod, a strong spring pulls the valve down to its seat and holds it there, until it is again raised by the cam."

Johnson's answer is as follows:

"The valves form a very important part of a gasoline engine, for on their proper operation largely depends the efficiency of the motor. The inlet valves open to admit the explosive vapor, which is then ignited, and the waste gases are expelled by way of the exhaust valves.

"Inlet valves are of two kinds—automatic, or those opened by suction, and mechanical; exhaust valves are always mechanical. For sake of convenience, let us first consider a single-cylinder motor with automatic inlet. To make clear the operation of the valves, it will be necessary to explain briefly the movements of the piston. This travels down twice and up twice to every explosion, or, in other words, makes two complete revolutions to each power stroke. The momentum of the fly-wheel carries it over on the dead stroke. The piston, as it descends, sucks in a charge of gas. This is compressed on the return stroke and then exploded, which drives the piston down, and when it again returns it expels the waste gases resulting from the explosion.

"When the piston descends, at the beginning of the two revolutions that are required to each power stroke, a vacuum is formed in the cylinder. This causes the automatic inlet valve to open, for the spring which closes it is not strong enough to resist the suction force of the descending piston. When the vacuum is relieved by the in-rushing gas, the inlet valve closes. Then comes the explosion, as explained above. The exhaust valve, covering the port through which the exploded gases are driven, is kept closed by a powerful spring. At the right instant it is opened in this way: keyed to the main shaft of the engine is a gear wheel, which through other gears turns what is called the cam shaft. By means of two-to-one gearing the speed of the cam shaft is just half that of the main shaft, so that the latter revolves twice to the cam shaft's once. On the cam shaft is a raised lump of hard metal, called the cam, and this, as it comes around on the revolving cam shaft, lifts the exhaust valve, by means of a straight intermediary rod called the valve tappet. Of course, the exhaust valve is lifted in this way but once to every two revolutions of the engine, just as the inlet valve opens but once to every two revolutions.

"Now the operations of both valves can be easily understood. The inlet is opened by suction caused by the descending piston, and closed by its spring when the vacuum is relieved; the fresh gas is exploded and the piston driven down; when the piston returns, the exhaust valve is opened and the exploded gases driven out. It is highly important that the exhaust valve be "timed" to open at just the right position of the piston; an improperly timed valve will cause the motor to develop little power, or not to run at all.

"A mechanical inlet is operated after the same principle as the exhaust valve. A strong spring is used, and, as in case of the exhaust, the power to open the valve against this spring is furnished by the motor itself. The

inlet valve must also be timed to open at the right instant. In case of a twin-cylinder machine, the same system is followed out, but with a few additional parts and complications, for there are double the number of valves to be operated."

PORTED CYLINDERS.

ALFRED FRIEDLEIN.—There is no disadvantage in having the ports larger than the exhaust valve area, unless you cut them so large as to interfere with the compression of the charge. That is, so large that some of the charge escapes through the ports. Such ports will also take in dust on the compression stroke, in addition. Have the ports oblong and horizontally cut, or round. Drilling the fly-wheels and other parts is an advantage in reducing weight, as are lighter pistons (of aluminum for example), and the direct chain drive is of advantage in reducing friction. A compensating device with such a drive is desirable, and should be fitted on the hub.

For speed work, a spring frame would tend to very slightly reduce the speed of the machine, and rigid frame mounts only should be used. The multi-valve motors mentioned have removable cylinder heads. We cannot give you the diameter of the valves used.

CYCLECAR MAKERS.

J. N. DUMONT.—The Rollo cycle car is made by the Rollo Car Company, Ltd., Conybere street, Birmingham, England. The Bedelia is of French make and is handled outside of that country by the Car and Motor Sundries, Ltd., Croydon, England. The Sabella, an English cyclecar, is made by Sabella Cars, Ltd., 110 Albany street, London, N. W., and the G. W. K. cyclecar is the product of G. W. K., Ltd., Datchet, England. We doubt if you can get any detailed information, blueprints, etc., from these firms, unless you come to some business agreement. However, write them.

Happ M. Mavis and L. J. Strait.—See the answer to J. N. Dumont in this issue.

MEDALS DISTRIBUTED.

AT the last bi-monthly smoker of the Providence (R. I.) M. C., held Friday, October 25, medals were awarded to the participants who finished in the recent Triangle run. The medals were given out by B. A. Swenson, and all those receiving them were called upon to give a brief account of the trip.



A CHINESE ENTHUSIAST.

G. ARTHUR SUN, of Shanghai, China, who has been studying business management at Brown University, in Providence, R. I., for some time past appears in the photograph on the Harley-Davidson machine to which he devotes most of his spare time.



A HOME-BUILT GARAGE.

E. P. CHAMBERLAIN, of Brownfield, Me., submits the accompanying photograph of a neat motorcycle garage which he has been using for some time past. The building, which was put up by Chamberlain himself, is about five by eight feet and has shelves for a 5-gallon gasoline tank, supplies, tools, etc.

LOOSE CONTACT POINTS.

AMONG the rather puzzling causes of hard starting, which is not due to the alternately cool and warm days of this season of the year, is the loosening of the platinum points on the contact lever of the magneto. Those who ride their machines hard all summer may have had their adjustments to make, but it is very probable that the little grinder-out of juice has not needed tinkering until the hard starting has developed. A peculiarity of this hard starting is the fact that on the stand the motor will go off on the first kick of the pedals, but will require a 100-yard sprint at about the rate of 11 seconds to get it to pick up its load. Look at the points inside the contact maker casing, and keep the little nuts tight.

COLD WEATHER TRIPS.

I THINK we all know that certain motors are hard to start in cold weather, even if everything is all right in carburetion, ignition and oiling. But this is the time of the year that I like to ride by night, and I meet lots of others who have the same liking apparently. A little tip for a hard-starting motor, on a cool night trip particularly, is keep the valves lowered at all times when the motor is not running. The heat is kept in as long as is possible, and even if it is a matter of an hour, the motor will start easier. If all the joints are tight, there will probably be some mixture in the cylinder also, which will help some.

ENDURANCE RUN POSTPONED.

AS a result of the death of Leo Martin, a prominent member of the Oakland (Cal.) M. C. and a well-known booster for the sport, the endurance run, which was to be held on October 26-27, was called off.

R. L. BAKER and **F. Hartman**, of Pittsburgh, recently visited Erie, Buffalo, Toronto, Montreal and New York City, on a 3,500-mile motorcycle trip.

THIRTEEN riders out of twenty-four starters finished the recent endurance run of the Zanesville M. C., to Lancaster, Columbus and Newark.

TIPS *And* TOPICS



STEPS have been taken in England to adopt a more stringent system of taxation for motorcycles and cyclecars, and as a result British riders are busy offering suggestions relative to methods of rating which might prove satisfactory. They have a knotty problem to contend with, but it is safe to say that, owing to their characteristic persistence, they will ultimately hit upon a reasonable solution. When they do, we should be glad to take a pointer or two from them. Our own taxation systems—varying considerably in the different States—are usually unsatisfactory. State officials either fail altogether to tax the motorcycle, and then offset this condition with exorbitant fines for the most trivial offenses by motorcyclists, or they impose a random tax on the motor two-wheelers without regard for horsepower, the wear and tear to which motorcycles subject the roads, or any other consideration.

THERE are indications that English riders favor a plan to have their machines taxed on a basis of cubic capacity, if there must be a readjustment, and such a suggestion was recently offered by a representative of the Auto Cycle Union at a hearing on the taxation question. The riders argue that it would be unfair to tax air and water-cooled motors under one head, and that rating by bore or stroke would prove equally unsatisfactory. The matter, after all, simmers down to a scale of the benefits derived by motorcyclists, the expense to which the government is put in regulating them and the part they play in depreciating the roads. If a happy medium can be struck by rating on cubic capacity, the plan will at least be worthy of serious thought on this side, and it may solve a problem for American State officials who are now considerably at sea as regards motorcycles.

THOSE of you who have been reading this magazine for more than two years will remember the talks of the "Veteran," who was a pioneer rider. He was a firm believer in good tools and a sufficient number of them, and his tool-roll was always fat and attracted much attention. Compared to the usual three wrenches, a stumpy screw driver and minute tire kit of the average mount, his outfit seemed like a sample case for a drop-forging salesman. He was a great advocate of the socket wrench in particular, and while rather fussy

on selecting the tool desired for a certain purpose, he could, when necessary, improvise devices to make up for any lack of proper appliances. On more than one occasion he wrote about the use of the proper tool for each job, but there seem to be lots of people who never read the Vet's articles, judging from the way they disable a wrench in short order, for instance.

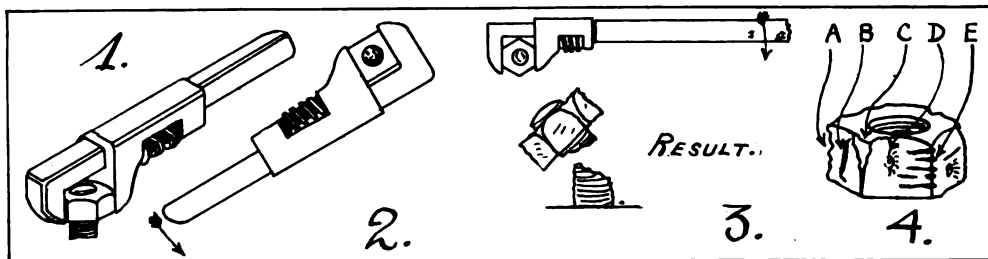
TAKE the monkey wrench, for example. The general rule for the correct use of this tool is: Keep tight and on the flat, with the jaws in the direction the nut is to be turned. But it is often more convenient for the user to put the wrench on "on end," as in Figure 1; this strains the jaws, and gives the Recording Angel extra work as the wrench slips and scarifies the fingers. The nut is also effected according to its degree of hardness. If you do this with a malleable wrench, monkey or open end, the jaws will break in short order. Figure 2 shows a monkey wrench in proper position for turning a nut in the direction *opposite* to the arrow, but wrong when turning in the direction of the arrow; the wrench then slips off and damages the user and the nut. In Figure 3 another misuse of the wrench is shown, here a piece of pipe is put over the wrench handle to start a rusted nut. The result is seen below.

LOOK at Figure 4; it comes from a motorcycle shop in New York. It was once a nut holding down a cylinder to the crankcase. It does not need much of a Sherlock Holmes to diagnose its troubles. However, for those who are in the habit of using any old wrench on the nut needing tightening or loosening, I will give the key. A and E are marks made by a Stillson wrench; B is where a cold chisel has been used to loosen the nut, and C is the result of using wrenches as in Figure 2. The edges of the nut are "wrenched" off. D is the mark of a cape-chisel or punch, used apparently for tightening the nut at one time. I have the original in my possession; the only thing that has not been done to it is splitting

OHIO motorcyclists, and Good Roads agitators in general throughout the State, have proved themselves in possession of a fighting spirit that is certain to carry them over all kinds of obstacles to ultimate achievement. Not long ago a proposition to bond the State for \$50,000,000 for the improvement of roads was lost at a special election by a small margin, and the boosters have already launched another campaign looking to more favorable action on their plan at the coming session of the legislature. The movement was defeated by only about 1,000 votes at the recent election, and there are indications that through consistent and enthusiastic effort from now on this balance can be placed on the other side of the book.

NORTHERN OHIO has some very good roads, and the central district highways are not to be complained of particularly, but in the southern section, and especially in the southeastern counties, there is an imperative demand for improvements. It is lamentable that a State already in possession of such an excellent foundation for its highway system should balk at the expenditure of funds required to make *all* its roads accessible, and it is the belief of the writer that when the situation is clearly brought home to the voters of the districts involved, there will be satisfactory action. The rural voter, when confronted by a proposition to have his State spend \$50,000,000, is temporarily panic-stricken, and unless he can see that such an investment is going to bring certain and commensurate returns—and that he is going to figure in those returns—he will fight the improvement plans to the last ditch. It is the task of the Good Roads worker to carry forward this campaign of education.

THE attention of the rural voter should be called to the fact that his property holdings advance in value proportionately with their accessibility, and that every improved road is simply a standing invitation to Prosperity. Let him understand that the world is moving too rapidly to turn aside through a guagmire to seek out Farmer Jones; that business in these days follows the channels of least resistance, and that his only chance to attract attention is to visit the nearest town regularly. If the roads are hub-deep with mud and clay he cannot make these trips, his products will not reach the best market



and very few city shekels will find their way into his pocket. The shekel argument is the strongest one with which to approach him. It strikes home. In short, it should be the aim of the Good Roads booster to prove that the future of a country—or a State—depends upon its highways; and there is proof aplenty in every State in the Union that good roads are worth all they cost.

AFTER covering 5,000 miles on his motorcycle over widely varying roads, a Brooklyn (N. Y.) rider estimates his total outlay—including \$5.10 for repairs—at \$23.90, and by way of directing attention to the economical advantages of the motor two-wheeler he states that this mileage could not have been covered by train for less than \$100. So far, so good. The balance of \$76.10 in favor of the motorcycle is certainly worthy of mention, but there is another item of even greater import—the healthful recreation derived from the motorcycle, which could not have been enjoyed in railway travel at any price.

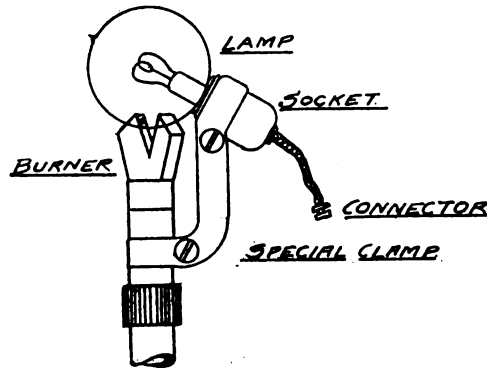
IN these busy days we are too prone to make all our comparisons on a basis of dollars and cents. True enough, the motorcycle's economy is one of its strongest assets, but if its running expenses were doubled, or even tripled, the balance would still be in its favor by a wide margin; a margin of days spent in close communion with nature, days of freedom from the city's wearing grind; days of fresh air, fresh thoughts and fresh aims. It is well enough to keep tab on the elusive dollars as they come and go, but when we subject the motorcycle to a comparison let us not overlook the really big items. After all, there is no return from the motorcycle so valuable as healthful recreation.

F. A. M. members who intend making application to the newly established Touring Bureau for routes or general information should keep in mind the present limited resources of that department and submit their

inquiries as far as possible in advance of the date set for a start on the prospective tour. Every effort is being made to have the touring service as prompt as is compatible with reliability, but it is often difficult to collect and mail satisfactory data for a long trip on a few days' notice. The rider as well as the Bureau will benefit by a more liberal time allowance on touring queries.

LIGHTING SYSTEMS.

WHEN two systems of lighting are resorted to for motorcycle service it is not necessary to fit extra head and tail lamps, as the equipment used for oil or gas may be modified to permit of the installation of electric bulbs, as shown in the accompanying illustration.



tion, submitted by William Hetherington, Jr., a Brooklyn (N. Y.) rider. These small bulbs can be fastened with a clamp which is easily made. If an electric system is used it may be used to operate a horn or whistle in addition to furnishing current for the lighting equipment. It may also supply current for ignition purposes in the case of a battery machine.

MOTORCYCLE POLO.

A NEW sport, motorcycle polo, has been introduced by the Kansas Short Grass Motorcycle Club, and that it requires much skill goes without saying.

HEAVY ENGLISH TAX!

**Proposed By Parliamentary Committee—
Motorcycle Owners May Pay as
Much as \$15 a Year.**

A PARLIAMENTARY committee, recently appointed in England to consider amendments to the present method of determining horsepower of automobiles and motorcycles for taxation purposes, has reported and recommends few changes. The committee considered that the proper basis for rating should be the average power which the engine of a car could develop in regular use on the roads if there were no restrictions in speed other than those imposed by the car itself.

In gasoline and steam cars the present method for determining the horsepower is to divide the piston area in square inches by $2\frac{1}{2}$ for engines of single-acting cylinders with a single piston; by $1\frac{1}{2}$ for single-acting cylinders having two pistons; and by $1\frac{1}{4}$ for double-acting cylinders having a single piston. It was recommended that this formula be left unchanged for gasoline cars.

For electric cars the present regulations prescribe that all motors shall be considered as developing 12 to 15 horsepower, and the committee recommends that this be lowered to $6\frac{1}{2}$ to 12 horsepower. It is also recommended that motorcycles, which now pay a uniform tax of £1 each, be classified as motor cars, and that the following rates be imposed: Not exceeding 5 horsepower, £1 (\$4.87); exceeding 5 but not exceeding $6\frac{1}{2}$ horsepower, £2 2s. (\$10.22); exceeding $6\frac{1}{2}$ but not exceeding 12 horsepower, £3 3s. (\$15.33).

SAVED BABY'S LIFE.

SAITH the New York Sun: "Persons who scorn the motorcycle should read this little story of a heroic performance from the heart of the Ozarks. A baby was dying of diphtheria at Fairplay, a small town fifty miles from Springfield, Mo. The attending physician decided that if he had some antitoxin the life of the baby could be saved, so he telephoned to a Springfield druggist asking him to put a box of the antitoxin on a 'Frisco train that left there at 11 o'clock at night. The druggist received the order only a few minutes before train time and when he got to the station the train had gone. The urgency of the situation had been impressed upon the druggist, so he induced Claude Stroop to attempt the journey on his motorcycle. Stroop started shortly after 11 o'clock. Fifteen miles of his journey was over a sand road, which necessarily impeded his progress. He finally reached Fairplay at 1 o'clock a. m., having consumed less than two hours' time in making the journey. At stretches in his tour he speeded his machine, he says, to a rate as high as fifty miles an hour. The baby was still alive when Stroop arrived and the antitoxin was delivered in time to save its life.

COFFMAN TURNS AUTHOR.

PRESIDENT A. B. COFFMAN, of the Motorcycle Manufacturers' Association, is the author of a highly interesting article on "The Motorcycle, Its Use and Abuse," which appears in the October number of the American Carpenter and Builder. The article is prepared especially with a view of proving the motorcycle's adaptability, and several photographs, showing contractors who make their business trips on motorcycles, add to its value.

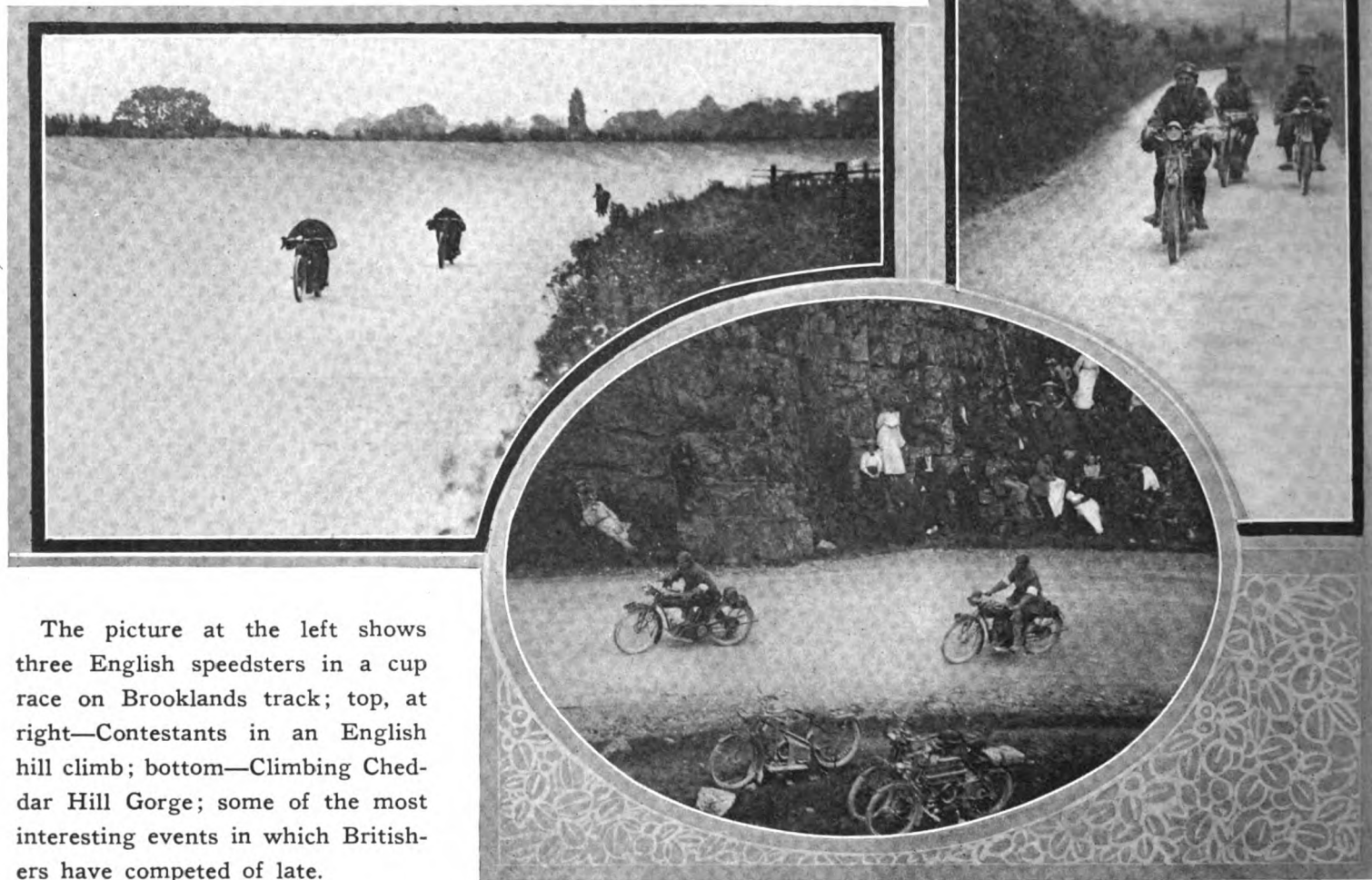
"FIRST AID" For the CARBURETER

The "Timely Tipster"

FROM time to time, and often with little warning, an ordinarily well-behaved motor will develop a cranky twist which cannot be traced to faults of ignition, valve mechanism or lubrication, and under such conditions the thoughtful motorcyclist will give early attention to his carbureter. When there is difficulty in starting—or when the motor has apparently decided not to start at all—the jet needle-valve should be examined, as it may not be seating properly, due to some foreign substance on its seat. Try regulating the tension of the spring of the auxiliary air-valve; this may effect a start, but if the lift or motion of the air-valve is seen to be abnormal, look to the jet at once. Blow downward from the mixing chamber to clean away any foreign matter, or use a straw; never employ a wood or metal probe. Examine the seat for damage, and reset the jet opening by means of the needle-valve.

Stoppage, with difficulty in starting, is occasionally due to too high a float level and this may be caused by a bend in the float lever. Try out with the auxiliary air-valve as before and then examine the float lever. The bend is usually due to too vigorous "tickling," and the lever should be removed for reshaping. Adjust the level of the gasoline in the chamber so that it stands about one thirty-second of an inch below the jet opening. A rather sudden stoppage may be due to water in the gasoline this being often found in fuel obtained in the country. Drain out the float chamber and fit a strainer in the fuel line, or carry a piece of chamois skin and pass all gasoline through it when filling the tank.

BRITISH RIDERS ON TRACK AND ROAD



The picture at the left shows three English speedsters in a cup race on Brooklands track; top, at right—Contestants in an English hill climb; bottom—Climbing Cheddar Hill Gorge; some of the most interesting events in which Britishers have competed of late.

SEVEN SPILLS AND DIVERSE OTHER TRIBULATIONS

JAMES F. WELSH, of 1221 North Third street, Harrisburg, Pa., believes he is entitled to any trophy that has been set aside for the champion spiller, and in the article printed below he sets forth his claims. On his first day of riding Welsh struck a sandy stretch after dark which brought him to earth seven times in three miles. He also had a few other thrills which are referred to in the following paragraphs.

I received my machine on a Friday and was naturally very anxious to try it out. Accordingly I decided to make a trip on Sunday and invited a friend, an experienced rider, to go along with me. It seemed years before Sunday arrived, but it came at last, and by 4 a. m. we were on our way, with my friend, Harry Hunt, in the lead. The first five miles were over sandy roads and I had some difficulty in keeping my seat. We had our lights burning, as it was still quite dark. At last we struck roads where the going was good, and I gained confidence in myself and at the same time became careless. Right there I had some of the conceit taken out of me, for I hit

a stone and went down. The old saying is that "a rolling stone gathers no moss," but they are great on gathering green motorcyclists who think they can ride with one hand, and I can prove it. After straightening my crank and absorbing a few hot remarks from Harry, I started again. A short time later we went several miles out of our way, and it was some time before we found the right road again. We then had "good roads" for the rest of the trip; that is, the farmers told us they were good, and every rider knows what a farmer's idea of a good road is. However, we made the most of them and reached our destination at 9 o'clock. So far we had covered 75 miles.

After getting breakfast (for we had started without any), we enjoyed a good drink from the old well, and went to see the ladies. That was really the secret of our trip, as I wanted to show my machine to the girl I was interested in. About 3 p. m. Harry was ready to start for home so as to get there before dark, but by this time I considered myself "some rider" and thought it would be all right to ride part of the way in the dark. However, Harry was persistent, and we finally started, several hours later than we should have.

Everything went well for the first 30 miles; then I discovered that I was all out of oil. Being a novice, I had burned up three quarts of oil in 120 miles. Here for once luck was with me, as I found a saw mill where the power was furnished by a gasoline engine, and I persuaded the owner to give me his last quart of oil.

Harry was rather cross by this time and hit up a fast pace, but as my machine was the faster of the two I was able to keep up with him. After traveling several miles we reached Duncannon, where we stopped to light our lamps. We had no sooner stopped than a fair-sized crowd gathered and started to ask questions. Finally we broke away and started through what is known as Cove Narrows, and it was here that my trouble bug got busy again. I was going along in great shape when we struck heavy sand and the machine tried to get along without me, and succeeded for a few feet. I got up, recovered my Harley, and, thinking we understood each other better, started off again. Then came fall number two; then spills three, four, five and six. By that time I was all in; both cranks were bent and my lights were out, so I decided to camp all night in the mountains and proceeded to

go asleep alongside my machine. To my surprise Harry did not approve of my actions, and some of the pretty things he called me would have put life into an army mule, but they did not affect me; I was intent upon going to sleep. At last he threatened to knock my head off with a wrench and do a few other things, equally disfiguring, and I agreed to get back into the saddle. I was soon on the firing line again with the end of the Narrows in sight, but I was not to get off without another spill. This time I selected a bed of rocks as a landing place. Seven falls in three hours ought to be a record! Just out of the Narrows we struck a small town, where a lemon phosphate helped to revive my spirits. We reached home at last, and I now look back and say: "Yes, I made it without mishap," just as some of the other boys do. So ended my first day's outing, but it was not my last, for I find motorcycling one of the finest of outdoor sports, and have covered several thousand miles since the outing referred to in this article.

FROM MAINE TO THE COAST.

NELSON L. MOULTON, of Kitterly, Me., who left his home late in the summer for a motorcycle trip to San Francisco, was last heard from in Phoenix, Ariz. He spends considerable time sight-seeing and has encountered everything from deep sand to a six-inch snowstorm. At one time he had to walk for miles and allow the machine to pull itself. When he left Maine he was accompanied by a rider from San Francisco, who sold his machine on reaching Kansas City. From Phoenix Moulton will go to the Golden Gate City, via Yuma, San Diego and Los Angeles.

THE DALLAS SQUAD.

AMONG the riders now competing on the new Dallas (Tex.) bowl are: Edward Bowen, Harry Swartz, Wilmer Richards and Jim Cox, all from Denver; Mike Caffarello, of Cleveland; Bert Bruggerman, of Los Angeles; Jim Traffsky, St. Louis, and Edward Harmer, the speedy Chicago saucerite.

Two Views of Novel Machine Designed by Edward McDougall, a Dealer of Newark, N. J.

NEWARK INVENTOR'S NOVEL MACHINE

Cross-Seated Mount with Distinctive Frame Construction Affords Maximum Comfort and Is Capable of a Lively Pace.

By ROY S. PASCALL

W. EDWARD McDUGALL, of the firm of Bush & McDougall, of Newark, N. J., is the inventor of the unique machine which appears in the accompanying photographs. Aiming to provide a more comfortable two-passenger outfit than is available with the standard tandem seat, McDougall entered upon a radical frame departure and

decided to place the seat crosswise, so that plenty of room might be afforded. To permit of such construction entirely new lines were necessary at several points, but the inventor proceeded with an almost total disregard of present-day practice and ultimately realized all his expectations.

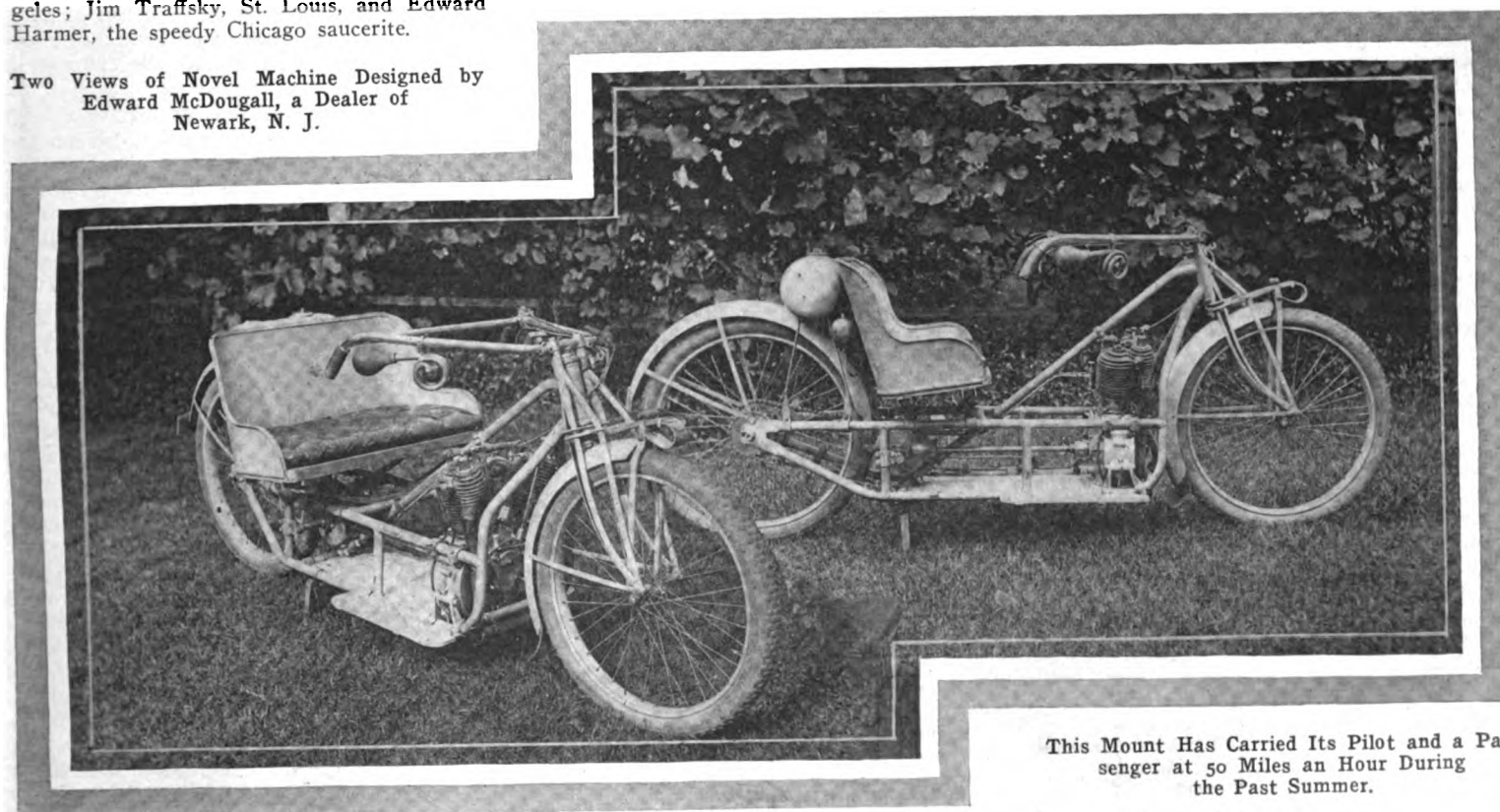
In some respects the new McDougall machine suggests automobile construction. The motor is placed forward in the frame and is mounted transversely. It drives through a shaft and bevel gears to a countershaft, and then by chain to the rear sprocket. A multiple disc clutch, working on the countershaft, is controlled by the foot—as is also the brake. A two-speed gear which is still on the inventor's drawing-board will be installed in the rear wheel during the coming winter.

The inventor calls attention to the special construction of the frame, which is unusually strong and rigid, owing to a carefully worked out system of bracing. The seat is upholstered and is wide enough for two people sitting side by side. It is supported on two semi-elliptical springs, thirty inches long, which absorb practically all road shocks. All the controls, both grip and foot, are located on the left side, the handlebars being built with a cross-brace for convenience in driving. The machine holds the road with the tenacity of a leech and is not subject to the violent skids often experienced by the riders of other two-wheelers.

On a recent hundred-mile try-out with the writer as a passenger the McDougall machine attained a speed of over fifty miles an hour, and the absence of fatigue and soreness was appreciated at the finish. The machine has been in almost constant use during the past summer over all kinds of roads.



Top View of Power Plant in the Ingenious McDougall Machine.



This Mount Has Carried Its Pilot and a Passenger at 50 Miles an Hour During the Past Summer.

INTERNATIONAL TOUR

BY DONALD MCKIE

PART VII

DONALD McKIE brings the Atlanta tourists to the end of their European jaunt in the following instalment of his article on the international trip, and the riders are now back in this country. This section of his story deals principally with English road customs and the most advantageous methods to be pursued in obtaining driving licenses and registering machines. He also gives a few tips of general value for the American motorcyclist who contemplates a trip abroad with his machine. In future issues Mr. McKie will present special articles on detailed expenses for a 5,000-mile motorcycle tour in Europe, on tire troubles abroad and kindred topics. His last instalment of the tour story follows.

On the Continent one is allowed only 66 pounds of baggage, but this may consist of articles of any kind. My Indian, weighing 264 pounds with the tandem attachment, was taken on this basis and overweight was charged. The cost of shipping from Paris to London was only \$4.40 and it would have been still less, but for the extremely high rate always charged for shipping across the English Channel. The railroads are far inferior to the average road in the United States. They have three classes, and as the proportion of third class passengers seems to be almost 99 per cent., we always took that class, when through necessity we were forced to use the railroads. It takes only one ride on a European train to make one fully appreciate his motorcycle.

On the boat trip across the Channel we met two other American motorcyclists, S. J. Templeton and Leonard D. Karcher, of Chicago, both having 4 h., T. T. Indians, with two-speed gears. They reported practically no trouble, except with tires, and had resorted to a type of Dunlop automobile casing, 28 x 2½ inches. In fitting this tire it was necessary to have a hole drilled in the rim, opposite the valve, where the regular automobile tire lug was used. The cover was very heavy and had given good service. These riders had been touring in Norway, Germany, France, England, Scotland, Wales and Ireland, and a description of their experiences, particularly in Norway, made us wish to tour that country, despite the experiences we had already had. The roads, they said varied from very good to very bad, the latter being the more plentiful. So severe were some of the

hills they encountered that even on low gear and with throttle wide open, their machines could make only ten miles per hour, which they considered good. The reader cannot imagine how delightful it is to meet motorcyclists from home, and exchange views and talk about the various experiences encountered.

How the A. C. U. Helps.

For the rider who cares about the appearance of his machine, it is very distressing to see it hoisted up on the boat for the Channel trip and then unloaded in the same manner, but if one personally superintends the job, no

damage will be done. However, this necessitates tipping practically the entire crew of the boat and anybody else who happens to be hanging around. As explained before, we had joined the Auto Cycle Union, of England, previous to leaving the United States. This is really the motorcycle branch of the Royal Automobile Club, and it is of great assistance to the tourist. On our arrival in England, although it was very early in the morning, a uniformed representative of the association was on hand to assist in the prompt and careful handling of our machines. For the Chicago boys, who were more fortunate than ourselves in having good tires, the official set about to procure gasoline and get them started on the right road. This is not all the A. C. U. does; it maintains uniformed guides on the roads all over England, their sole duty being to aid members of the association and make touring as simple and pleasant in England as possible.

Once in London there are four different kinds of tires that can be fitted on Indian rims. The prices run about the same as in the United States, but the quality of the average make is not up to our standard. About the best that England offers are the Kempshall and Palmer cord tires. Gasoline must be drained from the tanks when shipping. This comes in sealed cans and the standard price, in England, is 36 cents per gallon, but the English gallon is somewhat larger than ours. The two most popular brands of gasoline are sold by Shells and Prats; they are about equal in quality, which, by the way, is very good.

Rules for Registering.

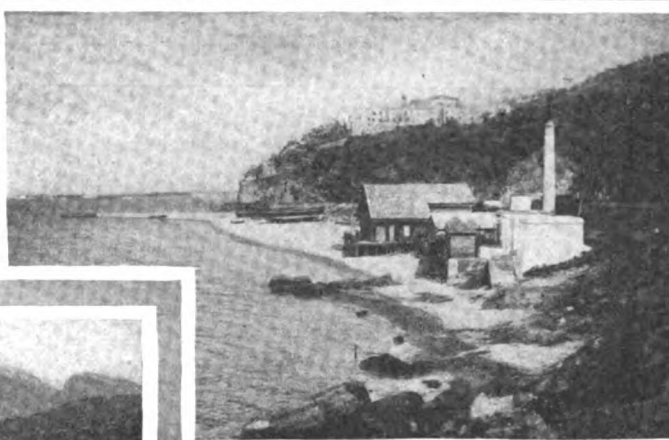
The procuring of a license for driving, and the registering of motors can be attended to at the government offices, in Spring Gardens, London, S. W. The registering is merely the designating of the numbers to be used, and a fee of \$1.20 is charged, while the garage charges \$2.50 for the number. A special size is required by law. A fee of \$1.20 is charged for a driving license. Private owners are

exempt from any technical examination, but licensed drivers have to appear at Scotland Yard for a rigid test. There is also a government tax on the machines, which is levied according to the value. This may be avoided if the rider is willing to take a chance, as there is a certain time of the year, October 1, I believe, when this tax is payable, and if not paid the visitor may wait until the next October. AM of



our party waited, and as we are now back home we are still waiting.

The roads throughout England are fine and I doubt if the British riders ever saw a really bad road. The main roads are all fairly wide, but unfortunately they have many bad curves and the riders are always racing over the roads like city firemen. A surprisingly large number of machines are met on the road and a goodly portion of them have side-cars attached. The single cylinder machines



Scenes
Along
the Route
of the
Atlanta
Tourists
in Italy.



in England seem very practical for side-car work, and it is marvelous how they pull steep hills. In all England the rule of the road is "keep to the left." We had been alternating from left to right in driving for so long that it did not seem at all awkward to us. Where the branch roads join the main ones, there are always hedges growing which make the by-roads invisible, and it is strange that there are not more accidents. Our advice to all who ride in England is to be very careful on the roads, and particularly at turns.

Some Novel Regulations.

In case of an accident or an arrest for speeding, the rider's name is taken and notification to appear before a certain court is mailed to the address given on his driving license, and an entry made in the back of the license, for which purpose there are several blank pages left. According to law the officer is not allowed to take the offender to jail. In case of an arrest of one of our party, for instance, which fortunately never occurred, we would have been notified at the American Express Company, in London. By the time we got back to London and received the notice, we would have been ready to leave England, and would hardly have gone back to appear in court.

Nearly all the roads are plainly marked with sign posts, giving the distance to several towns, and it is difficult to get lost. Before returning to London our route extended northward, just above the boundary line, into Scotland. We had contemplated a ride into northern Scotland, but I sold my Indian to Messrs. Godfrey & Applebee, the London agents for the Indian, and this virtually ended our trip abroad. In all we covered something like 6,000 miles.

Money-Saving Tips.

In summing up there is much that can be said in favor of and against a trip abroad. Such a tour can be made economical or costly, but the needless expenditure of money never gave anybody real pleasure or allowed them to see any more than the prudent person. A good

plan to adopt on the road is to begin inquiring for a hotel before dark, and if you think the price too high, go on to the next place.

Unlike roads in the United States, Continental routes are always dotted with good hotels. It is also well to have the price of every article written down, as this eliminates the possibility of an argument; this applies especially to the purchasing of gasoline, as after the tank is filled the dealer has no scruples about altering the price. Our entire trip was very enjoyable, despite twelve days of continuous riding in the rain.

LONG COLORADO TOUR

Grand Junction Rider Covers 1,687 Miles in Fifteen Days of Actual Riding, Mostly in Rain.

GRAND JUNCTION is a small town in western Colorado; so small, in fact, that comparatively few people have ever heard of it, but it is large enough to harbor at least one motorcyclist enthusiastic enough to do things in true western style. He is H. J. Zieman, who has just finished an eighteen day tour of the State; and this is the second time he has been around this season.

Starting from Grand Junction on his 7 h. Yale twin, Zieman headed for northwestern Colorado, crossed the State line into Wyoming, and then plugged through the rain and mud, along the snowy ridges and over the great Goar range. Once past its summit Zieman found the roads better and had easy riding until he came to the Continental Divide, some four miles of uphill going with an average grade of 16 per cent. Luckily the threatening rain held off until the downgrade was reached—but then it started in for keeps. The sandy roads absorbed a good part of the

downpour, however, and Zieman's motor kept popping away, so that he stuck to the road. Five days of mud, mountains and rain made him welcome a chance to rest up on the sixth day.

Warm and dry again he made his way to Denver, where he spent several days in testing, and then started in on the northern and eastern part of the State. Then the wet weather returned and Zieman decided to change his plans and make for Colorado Springs. After a short visit there he was off for Grand Junction. Again the rain came in torrents, but he managed to make the trip home in three days. Just eighteen days had elapsed from start to finish, and Zieman had covered 1,687 miles, in practically fifteen days of actual riding. Making a record of better than a hundred miles a day is quite a noteworthy achievement, when the rocky country traveled and the almost continuous rain are taken into consideration. The trip was made with an average of 83 miles per gallon of gasoline, nineteen gallons being used.

FINDLAY'S NEW ORDINANCE.

AFTER January 1, 1913, all motorcycles in Findlay, Ohio, will be required to carry a number, for which a fee of \$1 will be charged, according to a recently passed ordinance. This measure also provides a speed limit of eight miles per hour and prohibits open mufflers and riding at night without good lights.

MEMBERS of the East Lynn Motorcycle Club of Lynn, Mass., recently participated in a run to Hampton Beach. This was one of the club's feature runs of the season.

AMONG THE CLUBS

WITH BALTIMORE CLUBS

Riders in Maryland City Are Making the Most of Fine Touring Weather—Chicken Dinner at Ridgeville.

BALTIMORE, Md.—Members of the Maryland M. C. went up to Ridgeville on Sunday, October 27, to enjoy a chicken dinner. The boys are extremely fond of fowl and they always welcome a run to the Maryland city where such a repast can be had. The roads were in excellent condition following the rains of the previous week.

On Sunday, October 20, the club invaded Pennsylvania, a run being made to Hanover. This will probably be the last century run for this season, as Captain Standiford will hereafter take the boys out on the roads near the city. On the way up to the Keystone city the boys stopped off and gathered some chestnuts, the groves being spotted on a scouting trip by W. S. Fisher, the veteran motorcyclist.

Last Friday, October 25, a number of the boys went up to Frederick to witness the motorcycle races in connection with the fair. They took to the road in preference to loading their machines on a train, but before they reached their destination they became mud-larks. Two of the boys carried women tandem passengers, but they got through after having a couple of spills.

Thomas Dedge, the champion of Washington, and Freddie Tiemeyer, the Maryland champion, were scheduled for a speed duel to determine the best rider of the two, and they were disappointed when they reached Frederick and discovered that the track was in such bad shape that it was impossible to run any kind of races. They went up on the train, so as to conserve their energy. Howard A. French had promoted the races at the request of the fair officials.

IT is estimated that one person out of every 350 in Indianapolis rides a motorcycle.



IN the accompanying photograph appear L. S. Taylor, William Bewley and J. F. Sanford, the Merkel team in the recent Ohio State endurance run.



MOURN CLUB PRESIDENT.

THE accompanying photograph shows H. B. Martin, late president of the New Orleans M. C., who sustained fatal injuries in a fall from a scaffold recently while at work as a painter. Mr. Smith was born in Edgar county, Illinois, and also lived for some time in Joplin, Mo. He took up his residence in New Orleans in 1906 and started a sign-painting business in which he was quite successful. He became an ardent motorcyclist and an indefatigable worker for the advancement of the New Orleans club, being finally elected as its president. He is succeeded in the presidency by William P. Copping.

A TROY OUTFIT.

IN the accompanying photograph appear Mr. and Mrs. C. B. Henry, of Troy, N. Y., and their son. The picture was taken after a recent trip to New York City, in which both machine and sidecar stood up excellently. Henry drives an Indian with Majestic passenger attachment. He has fitted his sidecar with a spacious luggage carrier in the rear and has made various other valuable additions to his outfit. He is employed at the Cluett & Peabody collar and shirt factory in Troy. The photograph is forwarded by Edgar Brunelle, dealer in motorcycles and other sporting goods in Troy.

FIFTEEN members of the Sandy Hill Motorcycle Club, of Paterson, N. J., recently participated in a Sunday run to Glen Gardner, over a 150-mile course.

UTICANS WERE ENTERTAINED

Motorcyclists of Cortland Gave Visitors Cordial Reception and Played Hosts at Big Dinner.

ABOUT forty members of the Utica (N. Y.) Motorcycle Club participated in a run to Cortland on Sunday, October 20. The Oneida County courthouse was the starting point and the squad got under way at 7 a. m. With ideal weather and over almost perfect roads they proceeded without incident to Tully. Here a truly hospitable spirit was shown by the members of the Cortland Motorcycle Club, who, although they had learned of the intended visit only the day before, had a delegation on hand to greet the riders and escort them to Cortland. Secretary Ames, of the Cortland Club, had made arrangements at the hotel to accommodate the visitors. After partaking of a fine dinner the Uticans prepared to settle but were informed by the management that the bill had been paid by the Cortland Club.

Next they were taken to the clubs' headquarters, where a pleasant half hour was spent. The clubrooms are located in the center of the city. However, they do suit the club members and they expect to move to larger quarters soon. The kindness of the Cortland boys did not end here; they escorted the riders out by a better route than the one followed in going in. No difficulties were experienced on the homeward trip and Utica was reached by 7 p. m., the schedule time. This was one of the most pleasant runs the club has undertaken, and the cordial reception given them at Cortland scored a distinct hit.



C. B. Henry, of Troy, N. Y., with Wife and Son on Recent Sidecar Trip.



THAT JOINT OUTING.

IN the accompanying photograph the Harley-Davidson riders of Philadelphia, Pa., are lined up as they appeared prior to a recent run to Egg Harbor, N. J., where Alexander Klein, Harley-Davidson agent in Philadelphia, and William Heckenhorn, Harley-Davidson agent in Camden, N. J., were the hosts at a joint banquet. The picture was taken in front of Klein's headquarters when 86 riders were in line. At Camden the squad was joined by 24 riders, so that the party numbered 111 when it finally pulled into Egg Harbor City.

ST. LOUIS RIDERS BUSY.

AT the last meeting of the South Side Motorcycle Club, of St. Louis, Mo., it was decided that the run held on Sunday, October 20, should be the last of the season. These weekly runs have been a feature of the club's summer programme, as a sum of money is set aside each year to be paid in prizes to the three riders attending the most runs. It is the intention of the club to establish bowling teams for a winter tournament, and as there are not enough bowlers in the club, the officials will communicate with the other motorcycle clubs of St. Louis and East St. Louis, and arrange to have a team from each club compete.

OAKLAND CLUB ON RUN

A 110-MILE run was recently held by the members of the Oakland (Cal.) M. C. The course lay through San Francisco and then around the bay to San Jose. After leaving Oakland on the 8:30 a. m. ferry the riders headed up Market street at a slow pace and with minimum noise, thus creating an excellent impression. At San Jose they had dinner and visited the shop of Messrs. Schaackey & Viera, agents for the De Luxe, before returning to Oakland.

NEW GULFPORT CLUB.

IN the last issue announcement was made of the organization of a club in Mobile, Ala., with Edward Kocher as president; M. M. Wilinson, vice-president, and V. W. Root, secretary-treasurer. There is just one important detail awry in this statement; the club was formed in Gulfport, Miss., not in Mobile.

AT a recent meeting of the Columbus (Ga.) Motorcycle Club the following officers were elected: W. E. Page, president; J. C. Ingram, vice-president; G. P. Wright, secretary.

ROAD TRIP AND CLIMB.

TWENTY-FOUR members of the Indianapolis (Ind.) Motorcycle Club participated in a recent run to Spencer, a distance of 120 miles, and all but one finished. On the return trip all the riders had to climb the hill under the Monon railway at Gosport, with a right-angle turn in the middle. John Merz, on a Merkel won first place in the climb.

SALT LAKE PARADE

NO less than 100 machines, with banners and pennants flying, were entered in the recent parade of the Salt Lake City Motorcycle Club. The banners with the words "Safe and Sane Riding" were used to let the public know that the riders are banded together for the purpose of suppressing the speed fiend.

A SAN JOSE OUTING.

UNDER the leadership of J. C. Harris, 30 members of the San Jose M. C., recently made a 120-mile run to Half Moon Bay. The mountain roads were in good condition and when improvements now under way are completed, they will be among the finest in the state.



A WASHINGTON CUP WINNER.

W. F. THROOP, one of the winners in the recent endurance run of the National Capital M. C., of Washington, D. C., appears in the photograph with the Excelsior machine on which he scored perfectly. The run was over a 300-mile course.

F. A. M. COMMISSIONERS.

PRESIDENT PATTERSON has made further reappointments of F. A. M. commissioners as follows: R. B. Barnard, Box 105, Anaconda, Montana; B. A. Swenson, 522 Broad street, Providence, R. I.; William Wood, 712 North Monroe street, Baltimore, Md. E. F. Horine, of 1036 Bardstown road, Louisville, Ky., is a new appointee. Local commissioner appointments are as follows: A. E. Cobb, South Windham, Me.; L. E. Stair, Mitchell, So. D.; A. B. Ramsey, Sammamish, Wash.; C. J. Ritchie, Hoquiam, Wash.; M. E. Code, Toppenish, Wash.; James M. Anderson, Ocota, Wash.; Leon K. Pattison, Everett, Wash.

STUDENTS TO AFFILIATE.

COLUMBUS, Ohio.—Allando A. Case, president of the Ohio State University M. C., of Columbus, is reviving interest in that organization, which was founded last spring. Since the University has reopened many of the club members have returned and the rolls now contain about two score names. Others are joining daily. Quarters have been opened in the Ohio Club on the campus and an application has been made for membership in the F. A. M.

THREE NEW CLUBS.

NEW clubs affiliating with the F. A. M. during the week ending October 19 are reported by Secretary Gibson as follows: Indianapolis M. C., Indianapolis, Ind., secretary, R. H. Sturm, 325 No. Delaware avenue; Star M. C., San Luis, Obispo, Cal., secretary, C. E. Childers, 1044 Monterey street; Yale M. C., Chicago, Ill., secretary, C. J. Main, 722 W. Jackson boulevard.

REGISTERED REPAIR SHOPS

F. A. M. repair shops were registered for the week of October 14 as follows: Jenkins Cyclery (Henry Jenkins) 122 Fourth street, Santa Rosa, Cal.; G. C. Sandruck, 913 North Howard street, Baltimore, Md.

JACKSONVILLE BANQUET

A LARGE attendance and a good dinner marked the annual banquet of the Jacksonville (Fla.) Motorcycle Club, which was recently held at the Seminole Hotel. The club now boasts a membership of 150.

PROVIDENCE SMOKER.

ON Saturday evening, October 12, the Providence (R. I.) Motorcycle Club held one of its bi-monthly smokers. The attendance was large and the members found many incidents of the recent Triangle Run to talk over.

MANUFACTURERS

BROWN SCIENTIFIC TUBE

A Non-Deflating Tube of Novel Construction That Retains Its Air After Any Ordinary Puncture.

ONE of the principal drawbacks to complete enjoyment of motorcycle riding is that bugaboo to which every rider is subject—tire trouble.

It should, therefore, be of unusual interest to riders to learn that the Voorhees Rubber Manufacturing Company, of Jersey City, N. J., has placed on the market a non-deflating, air-filled motorcycle tube, which it claims will eliminate, to a large extent at least, flat tires, blow-outs and kindred troubles.

Several strong claims are made for the Brown Scientific Tube, principal among which are: First, that it withstands a tread puncture without deflating the tube; second, the higher the pressure, the tighter the puncture closes; third, because of the heavy tread and strong fabric insertion it reduces tread blow-outs; fourth, the risk of destroying casings by reason of punctured tubes is eliminated.

The principle, discovered and patented by the inventor, John Hamilton Brown, provides for the thickening of the tread portion of the tube, and when the tube is vulcanized it is turned inside out so that a compression of the rubber is obtained, sufficient to securely close a puncture; this compression is aided by an insertion of extremely high grade non-elastic fabric. The materials used are selected with special reference to the construction of this valuable invention, and represent the many years' experience in the business, as well as exhaustive practical tests with the sole purpose of making, without regard to cost, the most efficient pneumatic tube ever produced.

None of the so-called "dope," gum, paste, or other foreign matter is used in the Brown tube. It is just an ordinary air-filled tube, but by reason of a scientific though simple principle of construction, briefly described above, a puncture will automatically close, even when the aperture is as large as is made by a ten penny nail or knife blade.

THE NEW M-B.

CONSIDERABLE attention is being attracted to the new M-B machine, the product of the Morse-Beauregard Company, of Detroit, Mich., which recently appeared on the streets of Detroit, and the manufacturers look forward to ready sales when the 1913 season is under way. The company is headed by William Morse; William Beauregard is general manager, and Frank E. Whipple is secretary. The capital stock is being increased from \$10,000 to \$100,000.

F. C. MOHRFELD, of Trenton, N. J., has opened headquarters at 238 North Broad street, for the exclusive sale of Flanders machines.

SIMPLEX OIL GAUGE.

REPORTS from the Buck Sales Co., of 211 North Twelfth street, St. Louis, Mo., are to the effect that orders for its sight-glass oil gauge, recently placed on the market, are exceeding all expectations. The gauge, which is easily fitted in the crankcase of a motorcycle motor, shows the level of the lubricant at all times and thus enables the rider to operate at the greatest economy and efficiency. The device, which is sold under the trade name "Simplex," retails at \$1.50.



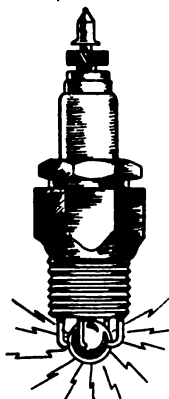
CROCKER AT DENVER

A. H. CROCKER, cashier of the Pacific coast branch of The Hendee Manufacturing Company, has been elevated to the management of the Denver branch. Mr. Crocker succeeds W. E. Johnston, who has been transferred to Atlanta, Ga., to assume charge of the new Indian branch just established in that thriving Southern city.

Crocker won his spurs as an Indian traveler in Kansas and Nebraska before going to California, and also has earned honors as an endurance rider. Upon taking charge at Denver he will relieve E. M. Jackson, who then will make his headquarters at the factory. Mr. Jackson succeeded Mr. Johnston pending the appointment of a permanent manager at Denver.

A NOVEL SPARK PLUG.

A NOVEL idea is embraced in the Flash Ball spark plug, manufactured by the Toledo Auto Devices Company, of Toledo, Ohio. The central electrode terminates in a ball which, it is claimed, acts as an accumulator of current besides providing for sparks of unusual intensity between itself and the four contact points of the shell. It is also stated that the ball deflects the sparks into the mixture, thus working for greater efficiency. The plug is now being manufactured for automobiles, but it is the intention of the makers to produce it for motorcycle service. The plug has given excellent results in tests.



BOWL FOR FORT WORTH?

IT is reported that Jack Prince is to build a new board track in Fort Worth, Texas, and that the project is being handled by R. A. Healy. Fort Worth is only 32 miles from Dallas.

A PROMISING OUTLOOK

U. S. Rubber Company Will Have Vast Yield from Millions of Trees in Sumatra Rubber Plantation.

RECENT reports are to the effect that the United States Rubber Company now has 80,000 acres of land in Sumatra planted in rubber trees, some 2,500,000 trees being set out, and already the prospects of the investment are held to be extremely promising. It is predicted that in time the company will be rendered independent of the open market, except for the finest Para. The oldest of the trees planted are now between two and three years old and as best results are obtained only by tapping trees not less than five years old, it will be two or three years before rubber from that source is expected.

It has been figured by some that when the trees begin to yield fully, there will be a saving equal to 4 per cent. on the common stock, basing this figure on an estimated output of 5,000,000 pounds from the plantations. Even the production of 1,000,000 pounds would mean an addition of a full 1 per cent. on the \$25,000,000 United States rubber common, taking the value of crude rubber at \$1 a pound, and estimating that it will cost the company 50 cents a pound to produce it in the plantation.

THE EGYPTIAN MIXER.

SATISFACTORY reports are being submitted with reference to the service given by the Egyptian Mixer, a patented device for completing the vaporization of fuel after it leaves the carbureter. The mixer is manufactured by the R. D. Loose Mixing Chamber Company, of 110 North Fifth street, Springfield, Ill. The device is inserted in the intake pipe between the vaporizer and the cylinders, where any particles of gasoline not previously aerated are broken up and converted into useful vapor.

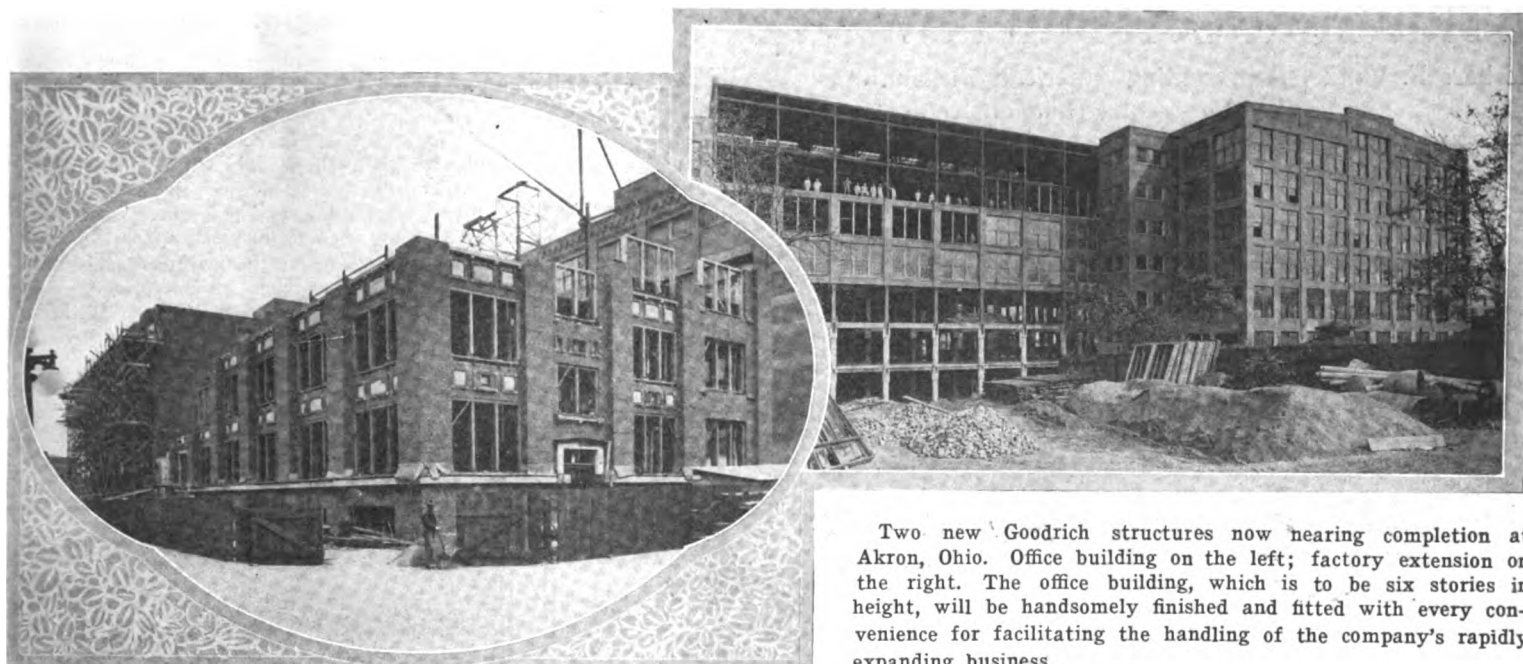
BRANCH IN BOSTON.

A DIRECT factory branch of the Pennsylvania Rubber Company, of Jeannette, Pa., has been opened at 149 Berkeley street, Boston, Mass. The branch will carry a complete line of the company's tires and rubber products. C. W. Lawrie has been appointed as manager.

ON PUBLICITY STAFF.

JOHN J. O'CONNOR, formerly with the *Bicycling World*, has joined the forces of the Hendee Manufacturing Company and will take care of Indian publicity hereafter. He has been a number of years officiating in motorcycle, bicycle and other track events in New York and vicinity.

LAWRENCE HALL, Flanders agent at Waco, Texas, has also taken the agency for the Excelsior for 1913.



Two new Goodrich structures now nearing completion at Akron, Ohio. Office building on the left; factory extension on the right. The office building, which is to be six stories in height, will be handsomely finished and fitted with every convenience for facilitating the handling of the company's rapidly expanding business.

NEW GOODRICH BUILDINGS.

RECENT additions to the B. F. Goodrich Company's plant in Akron, Ohio, remove any shadow of doubt as to the company's belief in the future of the rubber industry. Although the present floor space is between sixty and seventy acres, it is now being augmented by the new building shown at the right of the accompanying photograph. This structure, of six stories and basement, is 270 feet long by 157 feet wide. It is of modern, fireproof construction throughout.

As the office staff is increasing in proportion to the growth of the factory it has also been found necessary to make an extension for this department, and a six-story office building is in course of construction, while an extra floor is being added to the present offices. The new office structure appears in the photograph at the left.

ON SUMMER SCHEDULE.

IT is announced that all the United States Tire Company's plants will be operated throughout the winter on full summer schedule. This means that they will be run night and day, three shifts of workmen being employed.

NEW BRANCH MANAGERS.

H. A. FARR has been made manager of the Seattle (Wash.) branch of the United States Tire Company, and C. H. Mayer has been promoted to the managership of the branch in Portland, Ore.

A ST. PAUL EXTENSION.

THE Prest-O-Lite Company, Minneapolis, Minn., has bought property 80 by 336 feet in St. Paul, Minn., and will make extensions. The newly acquired land is valued at \$8,000.

FEDERAL COAST BRANCH.

L. L. RETTIG will be in charge of a factory branch of the Federal Rubber & Manufacturing Company, to be opened at an early date in San Francisco, Cal.

W. J. ASH, formerly with the Hine-Watt Company, is now on the staff of the Chicago Cycle Supply Company, as a traveling representative, his territory being the far West.

SLADKIN'S BIG CONTRACT.

A NNOUCEMENT is made by the Haverford Cycle Company, of Philadelphia, that it has contracted with the Excelsior Motor Manufacturing & Supply Company, of Chicago, for 3,000 Excelsior machines to be delivered for the 1913 season. The territory in which the Haverford company will distribute the Excelsior products includes the States of



Max Sladkin, of the Haverford Cycle Co.

Pennsylvania, New Jersey, Maryland, Delaware, Virginia, North Carolina, South Carolina and the District of Columbia.

In ten days the company booked orders for 1,150 machines, and it is confidently expected that the entire lot of 3,000 will have been disposed of before the New York show opens. The company is receiving 170 machines a month and during September all the machines were shipped promptly on orders. These conditions lead the Haverford company to believe that 1913 will break all sales records.

A LONG-DISTANCE SALE.

BALTIMORE, Md.—To sit in your store in Baltimore and sell goods to a man in Minnesota for delivery in Vermont is quite an unusual experience, yet Howard A. French has just done that very thing. Several days ago he received a letter from White Pine, Minn., in which a man said he had found one of French's circulars in which second-class machines were advertised. He enclosed the price of one and ordered that it be shipped to a man in Vergennes, Vt. French had in stock at the time just the kind of machine the man wanted, so he shipped it up to New England.

A NEW YORK COMPANY.

THE Knickerbocker Havers Company, of New York, capitalized at \$50,000, has been incorporated to deal in automobiles, motorcycles and motor vehicles generally. The incorporators are E. M. Cravath, B. M. Crosthwaite and F. E. Grant.

TRADE BREVITIES.

C. E. BARR, distributor for the Indian in Columbus, Ohio, recently left for Springfield, Mass., where he will visit the Hendee plant and make arrangements for his 1913 allotment of machines.

PIQUA, Ohio, now enjoys a larger and better Indian wigwam, thanks to W. O. Lane, local chief. The trail leads to 121 So. Market street, where Indian riders will receive a cordial welcome.

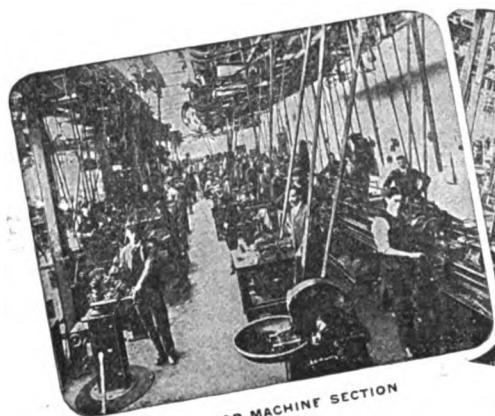
ANDREW KRAUS, Indian agent at Auburn, N. Y., is proud of his new headquarters at 8 Genesee street. It is 90 feet deep and has excellent showroom and shop facilities.

CHARLES BROOKS, of the Twentieth Century Manufacturing Company, has reached Chicago on his western trip and reports lively business all along the line.

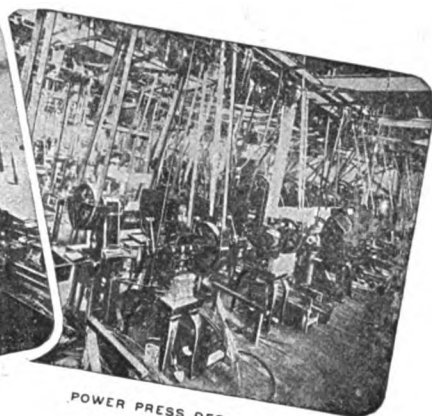
JESSE LESH, of Chattanooga, Tenn., who conducts a motorcycle and bicycle shop on West Sixth street, has taken the agency for the Pope.

A TRIP THROUGH THE COVENTRY PLANT

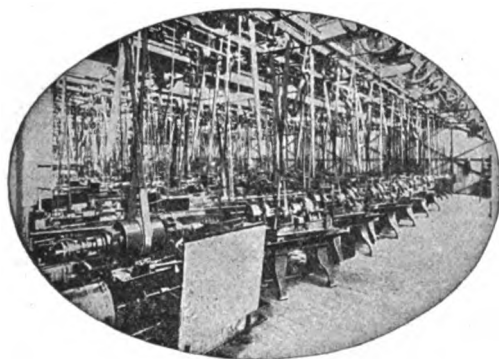
Herbert F. Funke, Representing American Distributors of Well-Known Chain Line, Gives Interesting Data on Return from England.



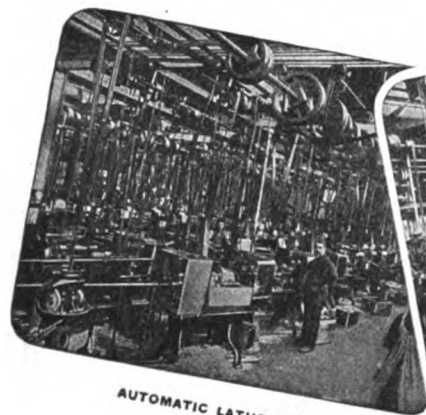
TOOL SHOP MACHINE SECTION



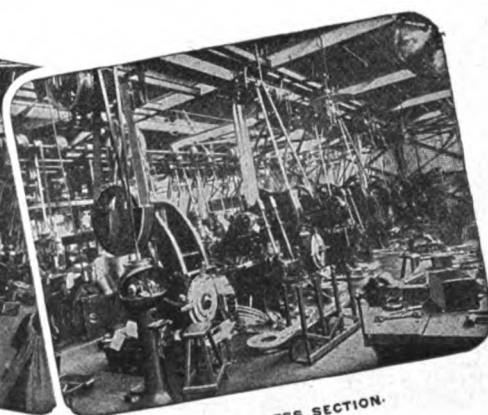
POWER PRESS DEPARTMENT



AUTOMATIC LATHE SECTION.



AUTOMATIC LATHE SECTION



POWER PRESS SECTION.

to quick and easy transportation to the works proper.

In the stores will also be found testing machines upon which frequent tests of the various qualities of steel are made. This insures a rigid adherence to the Coventry standard of quality. Then the material is labeled with the results of these tests, together with the date and the source of supply.

The visitor then follows the strip steel into the press room, where the material is fed into automatic presses, from which emerge, with incredible rapidity, links of the required size. These links are then beveled and barreled to remove any burrs, after which they are carefully inspected.

While the strip steel is undergoing the transformation into links, the steel bars are passed out to the automatic department, where machines of special construction and marvel-



Herbert F. L. Funke.

ous strength are used in the production of bushes, rivets, rollers, etc. These are cleaned and inspected and then passed out to the assembling department. Here hundreds of dexterous workers perform multitudinous operations on the many small pieces, the results being complete lengths of chains, in constant streams, which undergo another severe inspection and test.

Each chain is tested for a load much in excess of that which it will ever be called upon to bear in actual use. It is then given a grease bath to assure its being properly lubricated before leaving the works. The persistent testing and inspection which each chain undergoes is one of the features of the organization in the shops of The Coventry Chain Company, and the result is that efficiency in operation which is the leading characteristic of "The Coventry" chains.

In spite of the number of automatic machines used, over 1,400 persons are employed. A bonus is offered for extra good work, and it is consistently collected. The comfort of the employees has been of prime importance to the management, and in addition to the restaurant, where hot meals can be obtained, a circulating library has been established and stocked with standard educational works. All in all, the plant is a model of its kind.

COINCIDENT with the unloading of other heavy weights from the steamship *Lusitania* the other day, Herbert F. Funke, of the Sarco Engineering Company, United States distributors of "The Coventry Chains," ambled serenely down the gangplank and stood once more among the sounds, sights and smells of "good old New York." Mr. Funke had been on a combined business and pleasure trip through England, his main purpose being the annual inspection of the Coventry chain plant at Spon End Works, Coventry, England. So interesting is Mr. Funke's description of the various processes employed in the making of "The Coventry" chains that a brief resumé of the method of their manufacture is apropos.

Under the guidance of A. S. Hill, the managing director, the visitor is first given a comprehensive survey of the entire plant, which has a floor space of considerably over 100,000 square feet. Hygienically the buildings are ideal, the construction permitting of but one story, with the consequent increase in headlight.

In the receiving department, which is strategically situated so as to be easy of access to all parts of the works, will be found material of many sizes and sections to meet all the requirements of the various departments. Coils of strip steel for links of all sizes, and bundles of drawn and rolled steel bars are systematically stacked, with a view

THE HENDERSON ABROAD

SEVERAL American tourists who have returned from England during the last fortnight report that British riders and the trade are giving unusual attention to the Henderson machines now being demonstrated in London and vicinity, and that the four-cylinder mounts from Detroit are creating an excellent impression. Henderson machines have been shipped abroad in quite large numbers of late and the company's export trade is steadily growing.

While this field is being developed the company is not overlooking home sales, and an unusually active campaign has been mapped out for the coming season. Considerable new territory has been signed for during the last month, and assurances are being given that 1913 deliveries of the attractive Detroit mount will be made promptly.

A YEAR'S GROWTH.

LATEST reports are to the effect that the Goodyear Tire & Rubber Company has 67 branches, 11 of which are in Canada, 55 in the United States and 1 in Mexico, with a new field being opened in England, Australia, South Africa and European countries. Between September, 1911, and September, 1912, the company found it necessary to open direct factory branches as follows: Albany, N. Y.; Dayton, O.; Kansas City, Mo.; Denver, Col.; Newark, N. J.; Oakland, Cal.; Omaha, Neb.; Portland, Me.; Rochester, N. Y.; St. Paul, Minn.; Spokane, Wash.; Salt Lake City, Utah; Syracuse, N. Y.; Worcester, Mass., and Mexico City, making a total of sixteen new branches in the past twelve months. New Goodyear buildings have been erected the past year at Grand Rapids, Wis.; New York City; Baltimore, Md.; Buffalo, N. Y.; Columbus, O.; Birmingham, Ala.; Kansas City, Mo.; Louisville, Ky.; Minneapolis, Minn.; Memphis, Tenn.; Newark, N. J., and Philadelphia.

A HENDERSON agency has been opened in Washington, Pa., by the Union Motor Car Company.



A View of the Salesroom of the California Motorcycle Co., of Los Angeles, Cal.

READY FOR BIG THINGS

California Motorcycle Company of Los Angeles Has Entered Western Field Auspiciously.

THE California Motorcycle Company, located at 818 South Main street, Los Angeles, Cal., has just completed its incorporation under the laws of Arizona with a capital stock of \$50,000, divided into 5,000 shares of a par value of \$10 each. Of this stock, 3,400 shares are common stock and 1,600 shares preferred stock. Preferred stock will pay a 6 per cent. accumulative dividend before a dividend is set apart or paid on common stock. The company has also incorporated under the laws of California. The California company is an operating company and all business will be conducted by it.

The stock of the California company is held by the Arizona company, which is a holding company, and all the private stockholders are in the Arizona company. In this the stock



Headquarters of the California Cycle Co., in Los Angeles, Cal.

held by individuals is made fully paid and non-assessable, and there is no liability to the stockholders beyond the actual investment. The directors in the company are Thomas French, Jr., L. E. French and E. J. Spaulding. Officers are Thomas French, Jr., president, and L. E. French, secretary and treasurer. The California Motorcycle Company is handling the Eagle and M. M. machines.

The business affairs of the company are managed by L. E. French. Mr. French went out to California from Buffalo, N. Y., a year ago. He was manager of the Buffalo branch of the American Motor Company for two years. He is a graduate in mechanical engineering of Harvard University. He will be aided in his work by E. J. Spaulding, who will act as assistant manager. Mr. Spaulding is a graduate of Carnegie Tech. Besides handling the two motorcycles the California Motorcycle Company will manufacture a few motorcycle accessories. Mr. French has just taken out a patent on a new form of motorcycle lock which is attached direct to the frame of the machine.

1913 CONTRACTS.

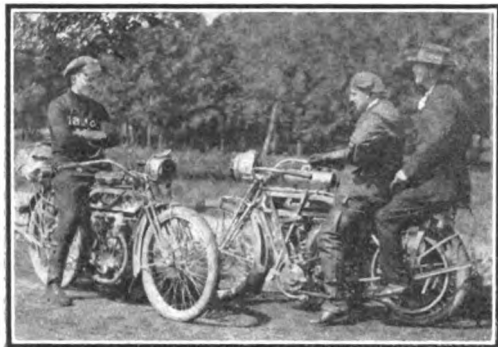
COLUMBUS, Ohio.—P. I. Haynes, of 45 North Third street, Columbus, has contracted to handle the Harley-Davidson and Flanders machines in central Ohio for the season of 1913. The first of the new models arrived about the middle of October. Mr. Haynes expected to make a trip to the Harley-Davidson factory at Milwaukee about the first of November.



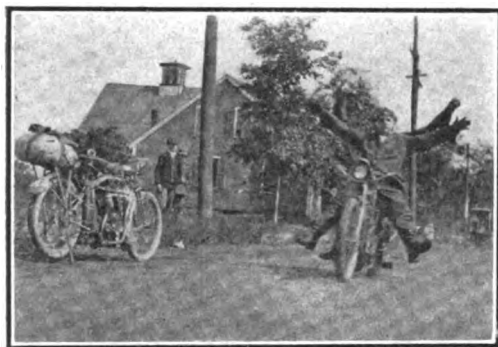
C. W. Waughop's Henderson Exhibit at Recent St. Louis Race Meet.

A BALANCING TEST.

FLOYD W. BAUM, of Champaign, Ill., who recently returned from a 3,500-mile European tour, appears at the left in the photograph, and at the right are Claude E.



Crout, of Hyde Park, Mass., and George R. Graves, of Boston, Mass. Baum and Crout had just met on the road when Graves happened along and perched himself on Crout's tandem attachment. While discussing roads and motorcycles in general Crout asserted that his Eagle machine was so well balanced that he could ride it at 40 miles an hour with both hands and feet free. Baum questioned his



ability to make good this boast and Crout went him one better by offering to carry him on his tandem seat during the test. The second picture shows the machine in action, both riders having their hands and feet free.

CAPTURED HORSE THIEF.

COLUMBUS, Ohio.—A motorcycle came in handy recently when Jack Windon, of Columbus, arrested a horse thief after giving chase for nine miles. The thief gave the name of Charles Scott, but has been identified as Frank Miller, of Circleville. He was chased by the police department and was at the point of escaping when Windon took up the chase on his motorcycle and succeeded in making the capture.

OAKLAND ENDURANCE RUN.

AN endurance run to Redding, Cal., was held on October 26 to 27, under the auspices of the Oakland Motorcycle Club. Many entries had been received from nearby towns. The distance covered was 530 miles and prizes in the shape of gold and silver medals were awarded to those finishing with perfect and "near-perfect" scores.

HOMER A. GARFORD, of 338 East Bridge street, Elyria, Ohio, reports the theft of his Harley-Davidson, chain-drive twin. The engine number was 5784-B.

IN a recent economy run held at Fairbury, Ill., one of the riders covered 40 miles on one quart of gasoline.

SALT LAKE OFFICERS.

AT the last meeting of the Salt Lake City (Utah) Motorcycle Club the following officers were elected: E. L. Hiteman, president; R. George Darke, vice-president; R. A. Van Alen, secretary; S. M. Solomon, treasurer, and L. S. Galeazzi was chosen captain. The officers, together with the following, compose a board of trustees: Lon Clafin, C. W. Brewer, J. L. Anderson, R. L. Irvine and A. Claspill.

ON EASTERN TRIP.

SALES Manager Robert Hinds, of the Yale staff, recently left Toledo for a ten-day trip through the East. He is accompanied by F. C. Cornish, sales manager for the bicycle department, and together they will visit Syracuse, Rochester, New York, Boston, Philadelphia, Baltimore and other large cities. They will close some big 1913 contracts both in the motorcycle and bicycle lines.

TRANSFERRED H-D INTERESTS.

T. C. DONAHUE, of Pittsburgh, Pa., who has handled the Harley-Davidson machines for the last few years, recently transferred his business to S. C. Hamilton, formerly the Excelsior agent. Mr. Hamilton will continue business at his old stand, 131 Collins avenue, and will carry a full line of sundries and parts.

HARRY LONG'S RIDE.

EDITOR **MOTORCYCLE ILLUSTRATED**—In the issue of October 3, page 21, is an account of Harry Long's great sidecar ride in the British Isles, in connection with which I would like to make the following statements: First, Long replaced only three valves during his 20,000 miles, and not one every 100 miles; second, the final drive on the 4 h. Singer is by 1½-inch V-belt, and the primary drive by chain. Belt drive even for sidecar work is still almost universal in England and is found perfectly satisfactory if the motor pulley is over 4 inches in diameter and the belt large enough. I drove a twin Rex and sidecar through the last London-Edinburgh run and experienced no belt trouble whatsoever, though the belt had done 600 miles previously.

RANDAL E. GOLDEN.

LEO BIRKENBACH, on his Thor, recently covered 64½ miles, in sixty minutes of continuous riding at the Columbus (Ohio) mile track.

**A BUSY SAN JOSE SHOP**

ONE of the busiest shops in San Jose, Cal., is operated by Schaackey & Viera, local agents for the De Luxe. The headquarters is shown in the accompanying photograph with a few members of the Oakland M. C. lined up outside. The firm believes in keep-

FROM PORTLAND.

ALL the way from Portland, Ore., comes the accompanying photograph showing four feminine enthusiasts. It is forwarded by R. A. Gaertner, M. M. agent in Portland, who states that the motorcycle has made rapid gains in popularity of late throughout his territory. Gaertner distributes M. M. and Eagle machines in Washington and Oregon and covers all his field on a 9 h. Eagle twin.



E. D. HENSLEY, 17 South Findlay street, Dayton, Ohio, has been appointed State secretary by the Ohio State commissioner, and the following committee chairmen were appointed: Press, Frank L. Valiant, Middletown; competition, R. W. Kirby, Urbana; legal action, Carl Cappel, Dayton; highway improvement, M. E. Remelin, Cincinnati.

AT a recent meeting of motorcyclists in Freeport, Ill., a club was formed and the following officers were elected: Dell Cole, president; C. L. Bossmeyer, vice-president; J. Boyd Luebbing, secretary-treasurer.

THE Indian Motorcycle Club, of Cincinnati, O., recently held the first of its winter bowling contests. These contests are between the riders of singles and twins. The club's membership is now near the 100 mark.

MOTORCYCLISTS in and near Oroville, Cal., about sixty in number, are planning to form a club and affiliate with the F. A. M.

ing on the jump, and as a result a promising business has been built up and the cause of the motorcycle has been rapidly advanced in San Jose and vicinity. Schaackey stands on the right of the De Luxe machine in the center of the picture, and Viera is at the left. Photo by H. Conboy.

FIVE SCORES INTACT

Nine Riders Started in National Capital Endurance Run, but Four Fell by the Wayside.

BECAUSE of threatening weather only nine starters took to the road in the recent endurance run of the National Capital Motorcycle Club; Earl Isel left 30 minutes late, but reached Westminster, the first checking station, only ten minutes behind time. Charles H. Cross was in charge at Westminster and checked off seven perfect scores; the eighth rider, W. W. Tancre, Excelsior, skidded and damaged his machine so that he was unable to continue. Lancaster was the next control, but before reaching that point, Kendig, P. E. M., and Egan, Excelsior, met with minor accidents and were forced out, leaving only six to be checked in by Alex Klein, who acted as the official at Lancaster. William Moore, Flanders, towed Kendig 14 miles to Lancaster and arrived at the checking station on time. Escorted by members of the Philadelphia Club, the riders reached the Quaker City in good time.

The return trip was started promptly at 7 o'clock the next morning, and by the time the riders reached Havre de Grace, Md., Ellis King, Excelsior, had dropped out. F. M. Mills, of Washington, was in charge of the Havre de Grace control. On leaving this point the riders were confronted by an unexpected difficulty; owing to a typographical error, the cards furnished the riders called for a schedule of nearly 40 miles an hour between Havre de Grace and Baltimore, and Baltimore and Washington. This was made more difficult as a long section of the road had recently been plowed by road-builders. Nevertheless the remaining five riders reached the Baltimore checking-master on time and then arrived at the finishing point in Washington in the following order: J. S. Berryman, Harley-Davidson, first; Earl Isel, Excelsior, second; G. W. Beall, Harley-Davidson, third; William Moore, Flanders, fourth, and W. F. Throop, Excelsior, fifth.

All the machines finishing were in good shape, and the excellent performance of the Flanders single was remarked particularly. This machine was the only single to finish.

THE DeLuxe motorcycle will be represented in Oakland, Cal., by the Oakland Cycle and Motor Company, 1720 San Pablo avenue.



W. H. Pelham, on 3-Valve Indian With Which He Won the Baribeau Cup at Winnipeg, Man.



Scenes on the Pyramid Lake Indian Reservation, Described in Volney E. Davis' Touring Story Published in the October 17 Issue.

DALLAS SAUCER OPENED.

NEARLY 2,000 race followers witnessed the opening program on the new Dallas (Texas) bowl recently, despite the fact that the State fair was running as a counter attraction. The races passed off without a mishap, and the crowd was well pleased with the exhibitions given. The Dallas saucer was completed in two weeks.

EXHIBITION RACES

AN exhibition race meet was recently staged at Petersburg, Va., by the Old Dominion Motorcycle Club, of Richmond. The object of the races was to interest the promoters of the State fair with a view of having motorcycle events staged at the fair next year, and a favorable impression was created.

AMONG the clubs to celebrate Halloween with entertainments was the Englewood M. C., of Chicago, Ill., whose members held a dance.

SEATTLE RACES.

AT the motorcycle races recently held in Madison Park, Seattle, Wash., Archie Taft, Excelsior, captured four firsts and one second out of five starts. His never-failing nerve and wonderful skill in handling his Excelsior made him a favorite with the crowd.

The 30-mile race for a purse of \$100 and the John Considine cup brought out three entrants, Taft, Freddie Mercer and E. P. Zwick. Mercer was forced to leave the track in the ninth mile on account of engine trouble, and Taft was an easy winner.

The opening race, a five-mile event, was the most interesting of the day. Taft, Mercer, D. A. Cline and Zwick were the entrants; Mercer led the field for the first seven laps, after which Taft set the pace. In this event Cline was thrown from his machine, but was uninjured. Taft finished first in the ten-mile event, with White, Indian, a close second. In the fifteen-mile race White crossed the tape with fifteen yards to spare and Taft was second. Taft proved himself to be the fastest eater in the six-mile novelty race, in which each contestant after riding two miles had to stop in front of the grandstand and gobble a good-sized chunk of huckleberry pie.

HANDICAP WAS TOO HEAVY.

BALTIMORE, Md.—The second novelty race at the Laurel meet was staged on Friday, October 18. Tommy Dedge, of Washington, who lost the previous race through a fluke in starting, was doped out to flash under the wire the winner. But the wise ones went to smash in figuring on past performances, and the surprise of the meet was sprung when the two horses came in first and second, with the foot runner a close third. Dedge failed to show at all and the two automobiles were completely out of the running. Dedge had a big handicap to overcome, he having more distance to cover than any of the other entrants, but at that he was figured to be an easy winner with his big 7 h. machine.

AN INDIANAPOLIS TOUR.

INDIANAPOLIS, Ind., October 26.—Captain E. P. Whitmer, of the Indianapolis M. C., led a band of fifteen riders on a two-day pleasure run to Louisville, Ky., today, where they were the guests of the Louisville Club. The Indianapolis riders went at the special request of the Louisville club that met the Hoosiers at Spencer, Ind., and escorted them to Kentucky soil. Since organizing some months ago the Indianapolis M. C. has 100 members.

THE U. S. Tire Company, Washington, D. C., will soon open a branch at 133 H street, N. W.



Wilfred Morrison, 15-year-old Toronto Rider.

LOS ANGELES BOWL OPEN

Big Crowd Sees Stars in Thrilling Exhibitions—Two Sensational Spills But No Serious Injuries.

LOS ANGELES, Cal.—Four thousand enthusiastic fans witnessed the opening of the Los Angeles Motordrome on Sunday afternoon, October 20. The use of unported machines seemed to be quite a success, as all the races were extremely close and the crowd was kept cheering for its favorites throughout each event. In the first race of the day W. G. Hamilton rode a two-mile exhibition and established a track record for single cylinder machines.

The two-mile invitation event was a warm contest between McNeil and Wold, the former winning by a narrow margin. Fleckstein, who took third money, was right up with the leaders all the way and at times looked like the winner. After the race was over McNeil shut off and came down on the running board and was coasting toward the paddock when Wold came up from the rear under power. Not seeing McNeil until he was almost upon him, he turned on the juice again and the first collision of the season occurred. Fortunately neither rider was seriously hurt, their injuries being small cuts and bruises, pretty well scattered.

Lee Humiston came out with a winning streak in the third race, and although given a good rub all the way through by Marty Graves, he managed to cross the tape a few feet ahead of the bunch. In the fourth lap Stokes was hanging onto Ward's rear wheel, and in attempting to make the pass his front wheel came in contact with Ward's rear wheels. Ward stayed on the track, but Stokes was thrown from his machine, sliding on his shoulders for a distance of nearly 100 feet. It was a great relief to the audience when Stokes climbed from under the wrecked machine and walked unassisted to the paddock. Several hundred small slivers and a few cuts and bruises were the extent of Stokes' injuries.

Fleckstein displayed good riding ability in the last lap of the Invitation event and crossed the tape just ahead of McNeil and Wold, who took second and third money in the order named. In the fifth event Humiston again nosed out Ward at the tape, while Montgomery was close behind in third position. Fleckstein was victorious in the sixth event by a small margin over Wold.

In the seventh event Al Ward and Humiston were fighting it out for the lead on the last lap and were riding side by side when Ward suddenly shot Humiston up the track when they were close to the tape, and in so doing gained a slight lead over Humiston which could not be overcome in the short distance remaining.

The Angel City Derby was as close as the previous races and was a nip-and-tuck affair between Humiston and Ward, with neither having very much on the other. In the last half of the last lap Humiston forged ahead and gained a slight lead, which he held to the tape. The consolation event was won by Dave Kinney, with Wells Bennett a close second.

First event, two-mile single stock machine—Won by W. C. Hamilton on P. E. M. Time, 1:52½. Record for stock single cylinder.

Two-mile professional invitation—Won by J. A. McNeil, Salt Lake (Indian); L. Fleckstein, Denver (Indian), second; Frank Wold,

Los Angeles (Indian), third. Time, 1:39.

Two-mile professional (open)—Won by L. I. Humiston, Salt Lake (Excelsior); M. J. Graves, Los Angeles (Indian), second; Al Ward, Los Angeles (Indian), third. Time, 1:37.

Professional invitation—Won by L. Fleckstein (Indian); J. H. McNeil (Indian), second; Frank Wold (Indian), third. Time, 2:29½.

Three-mile open—Won by L. I. Humiston (Excelsior); Al Ward (Indian), second; F. Montgomery (Indian), third. Time, 2:20½.

Four-mile invitation—Won by L. Fleckstein (Indian); Frank Wold (Indian), second; F. Verrill (Indian), third. Time, 3:26.

Four-mile professional (open)—Won by Al Ward (Indian); L. I. Humiston (Excelsior); F. Montgomery (Indian). Time, 3:21½.

Six-mile Angel City Motorcycle Club Derby—Won by L. I. Humiston (Excelsior); Al Ward (Indian), second; F. Montgomery (Indian), third. Time, 5:05½.

Two-mile consolation—Won by Dave Kinney; Wells Bennett, second; R. C. Regnon, third. Time, 1:40.

REPORT ON 24-HOUR RUN.

REFEREE R. H. CRISTY'S report on the recent 24-hour endurance run of the Worcester (Mass.) M. C. shows that the only perfect score went to Glen G. Crandall, a Thor rider. Watson J. Walker, Harley-Davidson, was in second place, with twenty points deducted from his score. He was four minutes late at Albany and in checking out of Springfield on the return trip he started ten minutes before his scheduled time. This leaves Walker with a score of 980. W. F. Mann, Thor, was third with a score of 956; he was seven minutes late at Albany and nineteen minutes behind time in checking in at the finish. Gustaf Johnson, Indian, had a score of 878 points, he having been ten minutes late at Albany and fifty-five minutes late at the finish. An allowance of two minutes was made at each control for variation in watches.

DURING 1911 no less than 3,712 motorcycles were registered in Massachusetts, and up to October 1 last the registration was 4,720.

A MOTORCYCLE jaunt of 1,000 miles, from their home in Aberdeen, S. D., to Minneapolis, Minn., was recently made by A. J. Eddy, F. J. Parsch, and G. E. Petrick.



F. A. Applebee, on Scott Machine, Winner of 1912 Senior T. T. Race.

F. A. M. STATE COMMISSIONERS.

THE latest State commissioner appointments by President Patterson are as follows: Shelton Sturges, 108 Court street, New Haven, Conn.; W. H. Whiting, 1328 Broadway, Denver, Col.; O. F. McLain, 18 West Market street, Indianapolis, Ind. Walter S. Chase, Milo Junction, and Francis O. Hill, of Monticello, are local appointees for Maine. Those for Colorado are: F. J. Herman, 122 South Union avenue, Pueblo; F. J. Miller, care of D. C. Muth Motor Company, Greeley; O. W. Hall, Fort Collins, and Henry E. Abbott, of Trinidad.

F. A. M. BULLETINS.

F. A. M. repair shops registered during the week ending October 26 were as follows: C. B. Hopping, 321 South Second street, Albuquerque, N. M.; O. E. Evans, 333 East Third street, Dayton, Ohio; J. C. Vesely, 1657 South Fortieth avenue, Chicago, Ill.; Century Cycle Company, P. G. Wagner, 198 South Main street, Akron, Ohio.

BAKER ON LONG TRIP.

ERWIN BAKER, the Indianapolis rider, is making an extensive trip through Ohio, Pennsylvania, New York, New Jersey and Maryland on his motorcycle. Immediately upon his return he will leave for Savannah, Ga., where he will compete in a 200-mile race late in November.



O. C. Godfrey Taking a Corner on T. T. Indian in English Trials.

ATTENTION MOTORCYCLE DEALERS

¶ We have an important announcement to make to the trade about November 10th, of interest to everybody who is in line for the big business in the big year 1913.

¶ You will want to get it at the same time as your competitor and we want you to have it.

¶ Detach the slip at the bottom of this page and mail it to us today. You will then receive this announcement promptly.

THE NEW DEPARTURE MFG. CO.
BRISTOL, CONN.

To the NEW DEPARTURE MFG. CO.,
BRISTOL, CONN.

We are motorcycle dealers and are agents for the.....motorcycle.
Please send us your big 1913 announcement.

Firm Name.....

Street Address.....

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MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

HERE'S YOUR CHANCE—1912 Reading Standard twin, with horn, lamp, tools, etc. Ridden only 500 miles and in perfect condition. For sale at a low price to cash buyer. Address "S." care of **MOTORCYCLE ILLUSTRATED**, 51 Chambers street, New York City.

FOR SALE—1912 4 h. Wagner, battery; run less than 500 miles; flat belt, Eclipse clutch, Presto tank, head and tail lamps, luggage carrier, horn and over \$5 worth of extra parts. Is in perfect condition. Have bought twin. Price for quick sale, \$140. Wilson, 56 Elizabeth street, Norwich, Conn.

PRACTICALLY brand new Henderson, with tandem, \$225; or exchange for diamonds or automobile. "B. & M." care of **MOTORCYCLE ILLUSTRATED**, 51 Chambers street, New York.

FOR SALE—Excelsior single, first-class condition; brand new tire; \$75. Also Merkel luggage carrier, new; \$2.75. H. H. Emrick, 1643 West Monument avenue, Dayton, Ohio.

FOR SALE—Schebler carburetor \$3.75; Heltzer carburetor \$3.75; new. H. H. Emrick, 1643 W. Monument avenue, Dayton, Ohio.

FOR SALE—Brand new 7-8 horse 1912 chain twin Harley-Davidson at substantial reduction. Customer refuses to pay for machine. Guaranteed perfect. Price and full particulars from Louis F. Bradburn, Canandaigua, N. Y.

"EUREKA."—Emergency Gasoline Tank Valve, screws in place of the ordinary gasoline tank needle valve. No soldering or altering necessary. By feeding the gasoline from a point above the bottom of the tank, it reserves one-fourth of the capacity of the tank for emergency. Removes all worry regarding gasoline supply. Made to fit Indian, M. M. R. S., Haverford, Excelsior, and Merkel. Price \$1.00, prepaid. Discount to dealers. Wm. E. Waldron, 411 N. Mercer st., New Castle, Pa.

FOR SALE—1912 Indian twin, run 500 miles; \$200; pair Goodyear tires, 28 x 2½, \$17. Brand new. Satisfaction guaranteed. Edgar Cavanah, Sibley, Ill.

FOR SALE—White Thor "5," ridden less than 500 miles, absolutely perfect condition; price, \$175. Address "Secretary," No. 1 Lancaster Terrace, Worcester, Mass.

BARGAINS: Closing out all machines exchanged for new Excelsiors; Indians, Excelsiors, E. S. Marvel. Guaranteed first-class condition. Also Flanders demonstrator. Ford Motorcycle Co., White Plains, N. Y.

PIERCE 4-cylinder Motorcycle, two-speed gear; run less than 500 miles, complete Presto outfit, lamps, luggage carrier, horn, etc.; cost, \$435, will sell for \$250. First deposit of \$15 gets it; balance C. O. D. Fred Dudley, 1 Irwin avenue, Roxbury, Mass.

RARE CHANCE. See Prices. Several Eclipse free engine pulleys for different makes \$12.50. Specify make and year of your machine. Speedometer \$7; lamp outfit \$4; tandem and luggage carrier \$5; cyclometer \$2; Prest-O-Lite \$8; 1912 **MOTORCYCLES**, never uncrated, below cost. Write to **MOTORCYCLE EXCHANGE**, Schenectady, N. Y.

FOR SALE—1912 Harley-Davidson, magneto single, \$125; 1912 Harley-Davidson twin, \$165; 1912 Iver Johnson, good as new, \$130. C. B. Vaughan, 173 Market street, Paterson, N. J.

FOR SALE or Exchange—1911 4 h. p. Excelsior, \$95; 1911 Wagner 4 h. p., \$95; 1910 magneto Harley-Davidson, \$110; Thor 1908 model, \$40. Wolke Cycle Co., Louisville, Ky.

FOR SALE—1912 twin 7 h. Indian; used but three months; in perfect running order; \$175. Will ship C. O. D. on receipt of \$25. Joseph Mattes, Odebolt, Iowa.

PATENTS

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FOR SALE OR EXCHANGE—Two new cameras; take and finish pictures immediately; post cards and buttons; worth \$75; used very little. Will exchange for good motorcycle. G. M. Tweed, R. F. D. No. 8, Lanc, Pa.

COMPLETE line motor repair parts for 10 leading makes sent prepaid at manufacturers prices. Motorcycle Equipment Co., Hammondsport, N. Y.

FOR SALE—One new side-car for motorcycle, \$25. H. Kaskel, Spencerville, O.

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FOUR-CYLINDER PIERCE motorcycle, 1911 model, two speeds, fine condition, regular \$400; my price, \$175 if taken quick. S. J. Byrne, 140 CHM avenue, Wintthrop, Mass.

INDIAN RIDERS, ATTENTION.—Make your clutch lever stay where you want it by using J. & S. clutch control, the only one that will positively keep your lever from slipping, on account of the spring tension and cork insert. Can be attached in one minute. Nothing to wear out. Mailed prepaid on receipt of \$1. Mail your order today. Nelson Johnson, 1511 W. Lafayette ave., Baltimore, Md.

MISCELLANEOUS

STOLEN.—Yale 1911, No. 6997, 4 h. p., flat belt, fully equipped; reward. C. B. Miller, 272 Smith street, Brooklyn, N. Y.

FOR SALE.—Substantial interest in Curtiss & Marvel Motorcycle Co. to practical motorcycle parties who will put in money against stock of parts and goodwill and take active management of the motorcycle business. Entire time of present management required for our aeronautical business. Address C. R. Hall, Secretary Curtiss Motor Co., Hammondsport, N. Y.

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THE LATEST AND BEST guaranteed Motorcycle Supplies at lowest prices will be shipped same day your order is received. You get satisfaction in every package. Write for largest Motorcycle Supply Catalog ever printed. Motorcycle Equipment Co., Hammondsport, N. Y.

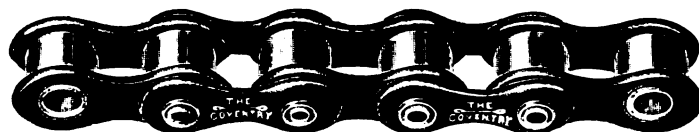
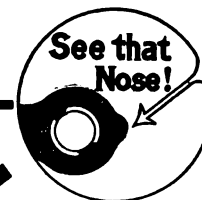
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SECOND-HAND MOTORCYCLES.—75 of them, \$25 up; three tri-cars, \$125, \$300 and \$350, respectively; expert repairing, experimental work, aeroplane supplies. New York Motorcycle Co., Inc., 318-320 West 48th street, New York.

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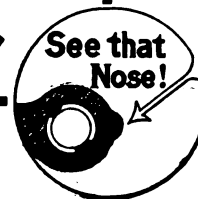
They are a truly dependable transmission.

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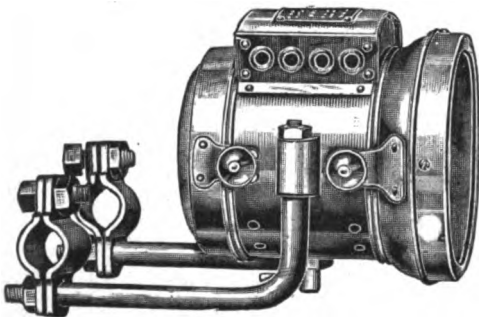
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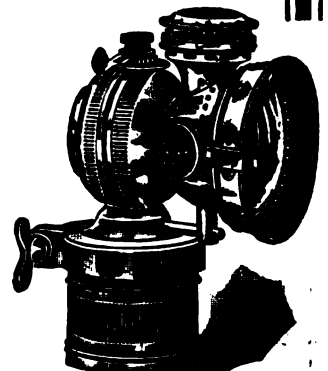
The 20th Century line of Bicycle Lamps are as popular as their motorcycle partners. We will have a very large sale for them in 1913. 20th Century generators are the best in the market. Special non-corroding and non-tightening locking device.

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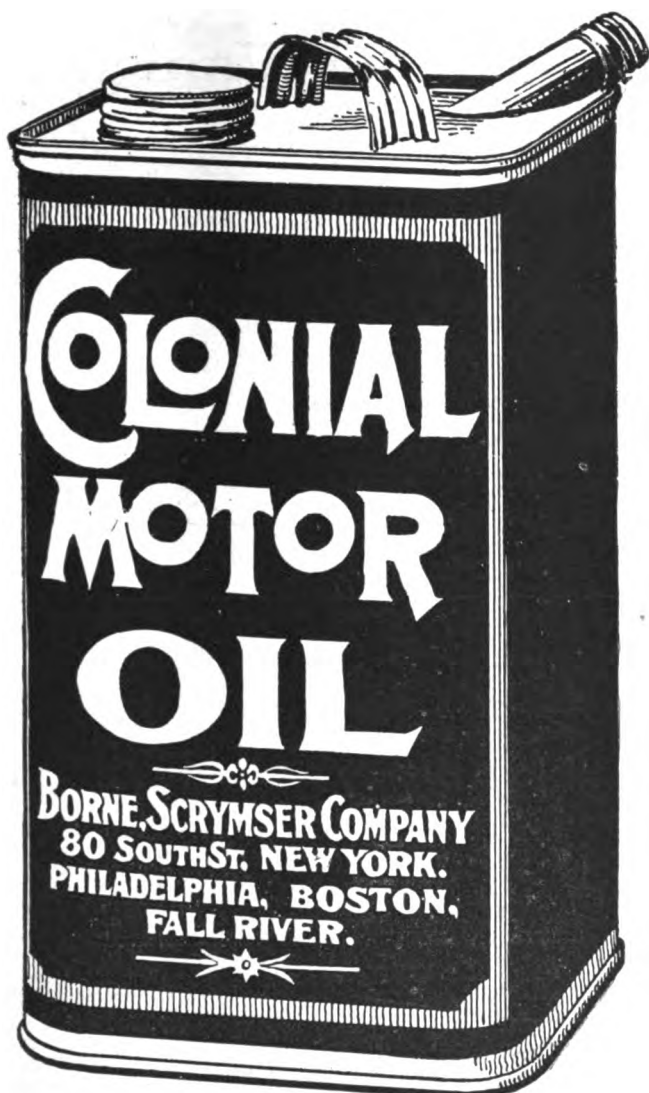
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against poor lubrication is in insisting on having an oil with an established reputation. That is why you should insist on having Colonial; because it is made by a firm with a reputation of over thirty years' standing for high-class products.

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Mackintosh Suit for Winter Wear and all around service. Specially selected by Carl S. Clancy and Walter Storey, his partner, for their tour around the world.

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Attention of Mr. Nathan.

Dear Mr. Nathan:
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Wishing you the wide-spread sale which your product deserves, I am
Yours very truly, CARL S. CLANCY, per M. E. P.

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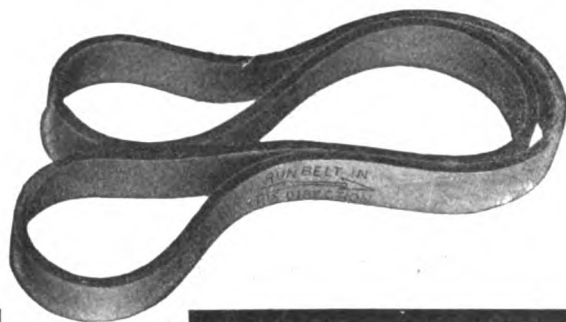
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We have only a small number of these suits which we will sell at this price. Enclosed find for which ship by exp. or fut., prepaid, suit as advertised, with the understanding that if not perfectly satisfied I may return it (them) within 10 days from receipt of shipment and you will refund my money. Give chest, waist and inside leg measure.

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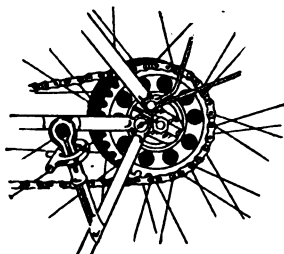
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Learn more about WETPRUFE BELTS before you decide on your 1913 transmission.

Hide Leather & Belting Co.
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Tear this out.
Please send me complete information on your
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JOBBER! List This Motorcycle Lock in Your 1913 Catalog



Riders are tired of having their motorcycles stolen. They fear to leave their machine alone for any length of time. But show riders that they can do this with a feeling of absolute security, if they use the Sabo Motorcycle Lock, and a sale is made in every instance. The Sabo is the newest motorcycle lock. It's neat, it's safe, it will last, it does the work. Made of bronze metal.

SABO MOTORCYCLE LOCK

Locks the machine on the stand, making it impossible to run it, and is so constructed that even the stand cannot be removed. The Sabo is durable, simple to operate and can be easily carried in the pocket. Write us today for prices. Thousands will be sold. We furnish cuts free.

Riders, Order Direct, if Not At Your Dealers

Use the convenient order form. Send dollar bill or money order. Don't take chances. One dollar is all the Sabo costs. Send for it today.

SABO MFG. Co., 3110 W. 25th St. Cleveland, O.

\$1 Postpaid
Order it today. Fill
in Coupon Now.

Order Coupon

SABO MFG. CO.,
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I enclose \$1. Please send me one Sabo
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Make of machine.....

Write your name and address above.



The Neverout
TRADE MARK

**Gas Lighting
Outfit**

FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

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It's going to be a long, cold winter!

and the old bus'll have to be put in the background for a while. That's the time to make your spring touring plans—lay out your trips, whether fifty or five hundred miles in length, with the aid of

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a publication of 56 large pages, made up entirely of maps and touring routes, including every tourable section in the United States, prepared especially for the motorcyclist's requirements.

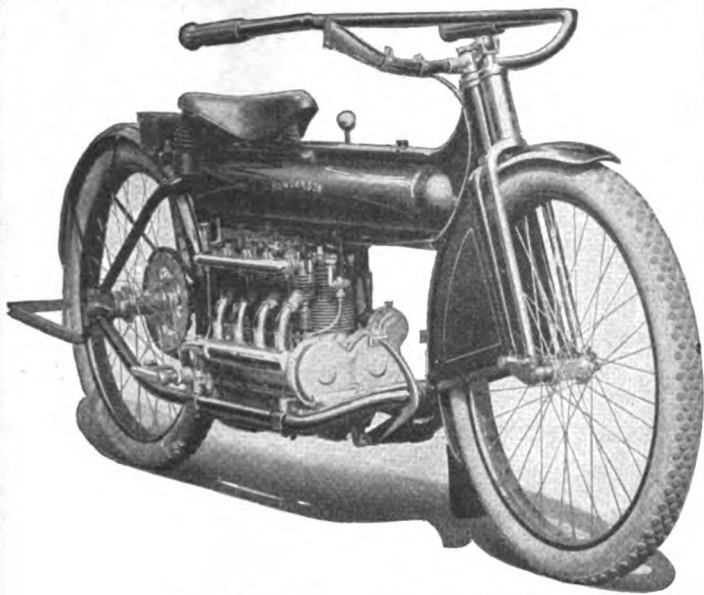
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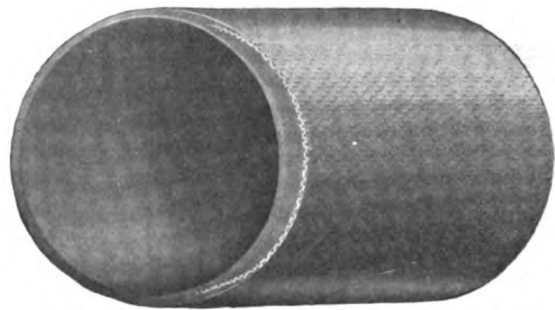
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AN AIR FILLED MOTORCYCLE TUBE POSSESSING VERY UNUSUAL FEATURES:

First: It withstands a tread puncture without deflating the tube.

Second: The higher the pressure the tighter the puncture closes.

Third: It eliminates the risk of destroying casings by reason of punctures.

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Fifth: It assures you of not being obliged to repair a puncture on the road and gets you "there and back" on full tires.

AIR FILLED ONLY

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**NO "DOPE," GUM, PASTE OR OTHER
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Write for prices, full description and sectional sample.

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A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

Schrader Universal Tire Pressure Gauge



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Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

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PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

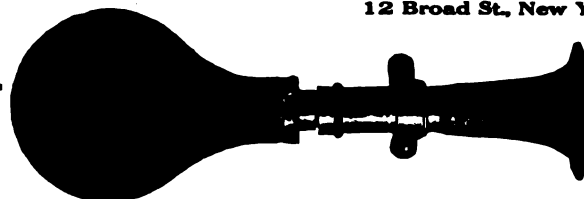
A. SCHRADER'S SON, Inc.
28-30-32-33 Rose Street NEW YORK CITY

You Should Catalog the Acme Siren

The Jobbers and Dealers who are now making up their 1913 catalogs should write for electrotypes of "the little horn with the enormous range."

Sarco Engineering Co.

12 Broad St., New York

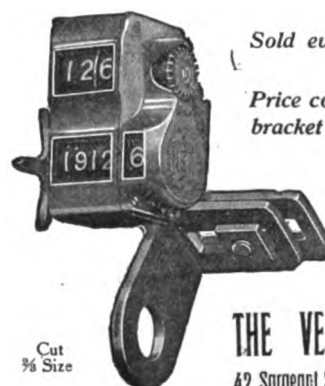


Veeder Motorcycle Trip Cyclometer

Adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.

*Specially constructed to with-
stand hard motorcycle usage*

Easily adjusted to any motorcycle. Made for 24, 26, 28 and 30-in. wheels.



Sold everywhere—or write us

Price complete with bracket and striker **\$3.00**

Also makers of Odometers, Tachometers, Counters and Fine Castings.

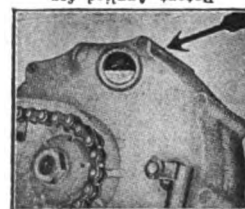
THE VEEDER MFG. CO.
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Boys, it's the greatest ever! A night-glass oil gauge for the crankcase of your engine. Can be put on any machine in 15 minutes. Not necessary to make large hole in crankcase. Ask your dealer, or write for catalog.

Patent Applied for.

\$1.50

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ready to put on—
plate, with tools,
Shipped all com-



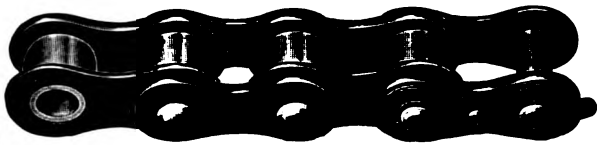
Makes your
Engine run
steady
Plugs will not
foul or sput up

WE'RE ALL UPSIDE!
It is only a short time since we put our new NIGHT-GLASS OIL GAUGE on the market, but we have been fairly overwhelmed with orders. Not that we can't make deliveries! But the rush of orders has so far exceeded our expectations that we have to keep on the jump to fill them.

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Every "Whitney" Chain has a reputation back of it, a reputation of having been tested in the most trying service and never failing to make good. We've made chains for years and through our untiring efforts to produce nothing but the best our chains have gained a remarkable reputation. You can't go wrong by placing a "Whitney" on your machine.



When making replacements insist on a "Whitney" and get acquainted with its merits.

The Whitney Mfg. Co.
HARTFORD, CONN.

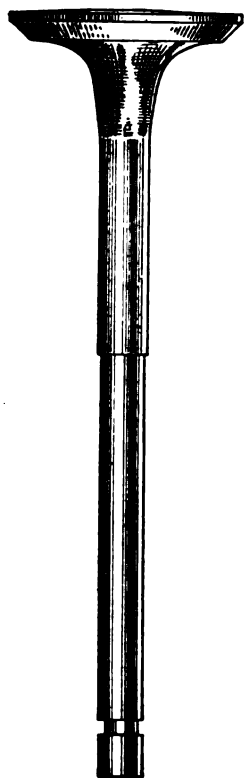
Motorcycle Valve Stems

get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

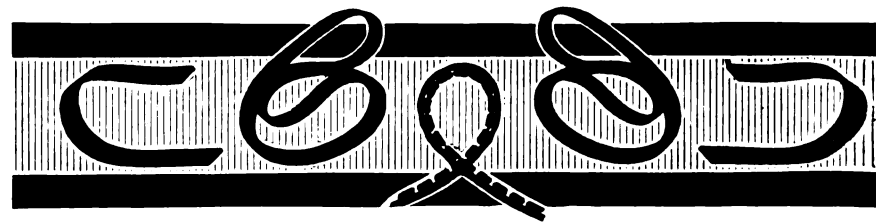
By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

If you are not using them, will you go into the matter with us?



The Electric Welding Products Co.
Cleveland :: :: Ohio



Our Progressive Platform

1913 is some distance away, but we are getting ready for it now, and we don't need a telescope to see that it will be the best year yet.

Between ourselves, the 1913 SEA LION and WHITE STRIP Belts are wonders. We have watched the 1912 belts all the year and where we found opportunity for improvements, they have been made.

We could take up a lot of space telling you WHY SEA LION and WHITE STRIP Belts are the best, but you want proofs. Ask any one of the big motorcycle manufacturers, Harley-Davidson Motor Co., for instance (and you know they use only SEA LION), and see what they say. They know, if anyone does.

Our policy of co-operation with our dealers has met with such success this year, that we are going to expand that policy and want every 1913 dealer to get in touch with us. It will mean bigger profits for you, and your success is our success.

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124 North Green St.
Chicago

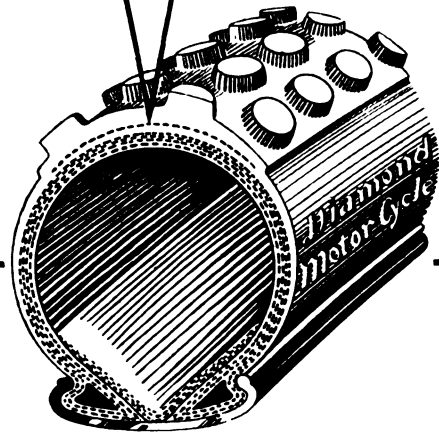
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New Orleans
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SIGN AND MAIL TO
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124 N. Green Street
Chicago

TO DEALERS
There is going to be a big motorcycle melon cut next year, and every dealer will get a slice. Do you want only the seeds?
If not, sign this and get on our mailing list.
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ADDRESS.....

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DOWN
TO THE
POINT**



THE BREAKER STRIP

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Diamond

29" x 3" Motorcycle Tire—and the only motorcycle tire that has a breaker strip.

That breaker strip is the point. A point that no motorcycle rider can afford to overlook.

It means increased mileage, lower tire expense, and vastly increases the easy riding qualities of your machine.

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We will pay a reward of \$25.00

for recovery of Excelsior Auto-Cycle, seven horsepower, number 36654, and \$50.00 reward for recovery of machine and conviction of party shown in the illustration.

Machine secured under name of S. B. Bishop, but later information gives correct name as Welsh.

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Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

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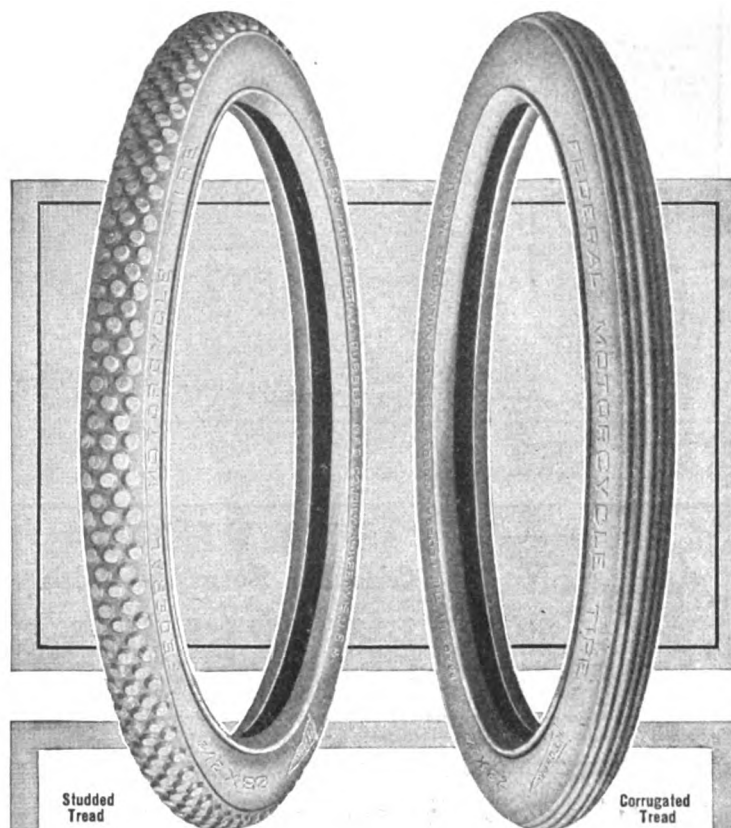
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They are supplied through leading dealers every-
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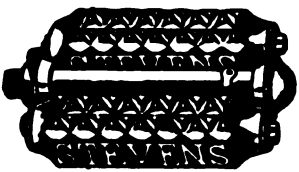
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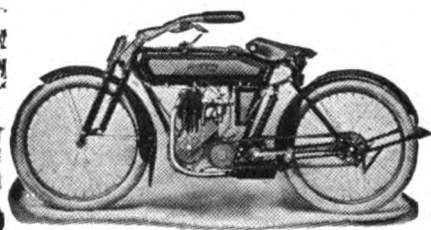
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Before you decide definitely upon your machine, get our catalog. Learn the reason for the speed, the silence, the power, the durability—the all-around perfection of

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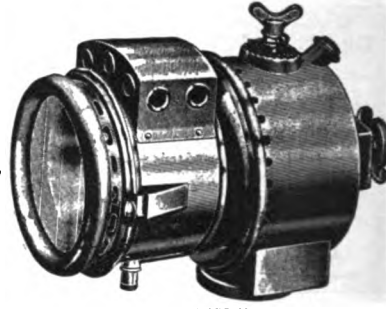
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The latest move of the F. A. M. for the assistance of the members and the general advancement of the motorcycle is the establishment of a Touring Bureau, which aims to give affiliated riders all available information on touring routes. This Bureau will be at your service when you become a member of the F. A. M. Think it over today and write

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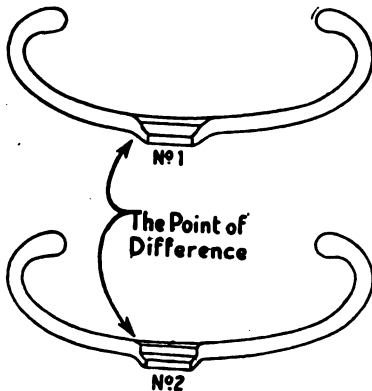
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THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

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56 Pages

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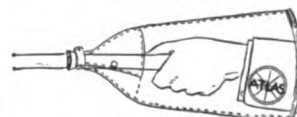
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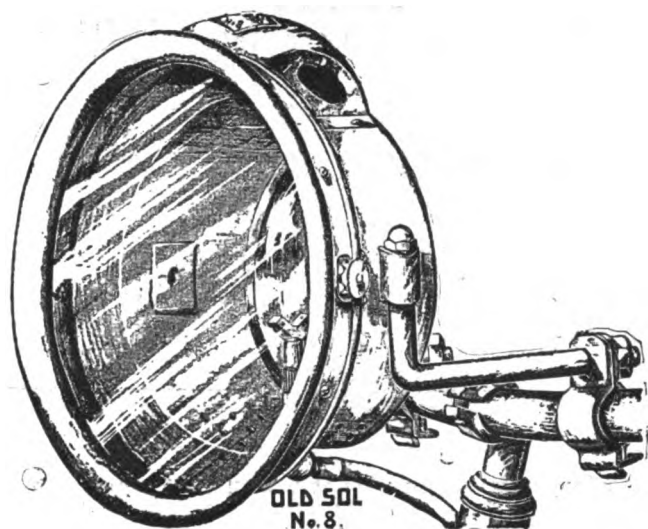
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This is the "daddy" of the "Partners to the Sun" line. It has achieved for itself a reputation which might well be envied. We cheerfully admit that "Old Sol" No. 8 is heavier than the usual lamp. Otherwise it would not be

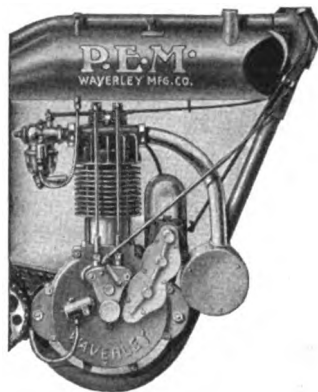
the largest, the strongest and most durable motorcycle lamp made.

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This is a record we are proud of, and justly so. Now we have made good—in speed—in reliability—in quality, and next season we will be able to show "our heels" to any of them on the track or on the road—watch for the announcement of our new models—or write for booklet.

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Two cents per week is all it costs to be a member of the F. A. M., the national organization of motorcyclists. Its strength and influence and the value of the service it can render you are directly proportioned to the number of its members. Join and ask your fellow riders to do likewise. The F. A. M. is worthy of your support. Write

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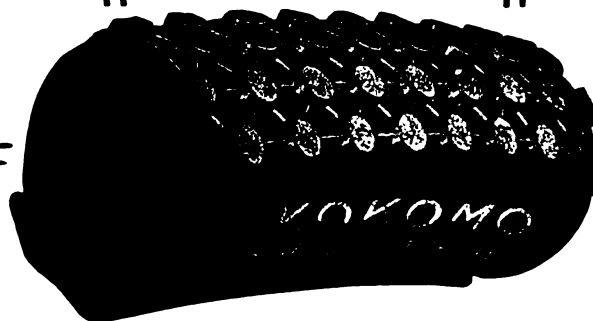
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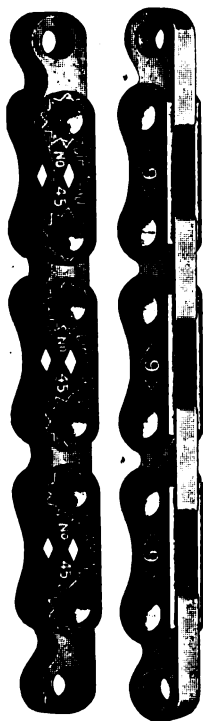
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"When we put out a Diamond Chain we never hear of it afterwards"



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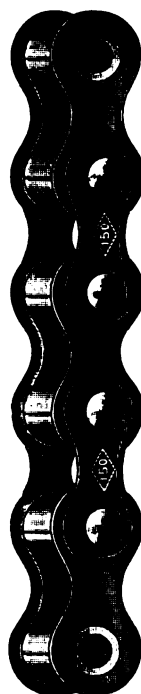
It's the high grade material, accurate workmanship and our pioneer experience in chain making that make such lasting friends for Diamond Chains, and have made these the standard equipment for the past 21 years. When buying a new chain, know what you are getting. Look for the Diamond trade-mark on the connecting link.

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Capacity 8,000,000 feet per year
SAMPLES SUBMITTED



120

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If you are in the field to buy, sell or exchange try a classified advertisement.

One insertion usually "delivers the goods."

Thirteen Thousand Riders Read

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Single cylinder, 4 h. p., Battery, \$140.

Bosch Magneto, \$160.

4 1/2 Magneto, Free Engine, \$200.

Two cylinder, 8 h. p. Bosch Magneto, \$225.

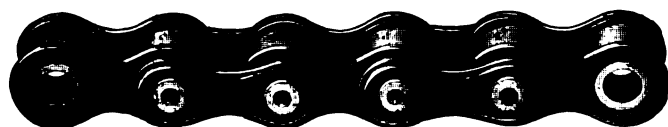
Immediate delivery.

Full line of accessories.

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"DUCKWORTH"

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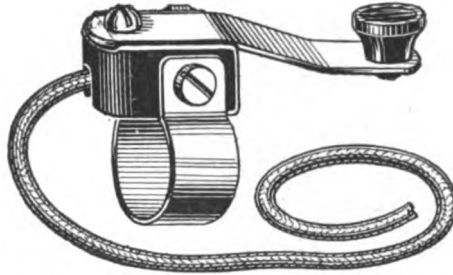
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Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape. 50c per Roll—send for some today and save your belt. State width.

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Don't depend solely upon your delicate grip control mechanism. If it should refuse to work at a critical moment, — there'd be trouble. Get a

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Price 50c, or complete with cable, 75c. By mail, postpaid. We also make the celebrated Simplex Side Cars. Let us send you our booklet

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Keep your feet always on the Pedals



The deep rubber corrugations in the big cushions on

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keep the feet in the proper position. When going over rough roads, the constant jarring and bumping makes it very uncomfortable for the rider who cannot make his feet stay "put"—not to mention the fact that he cannot readily use his brake.

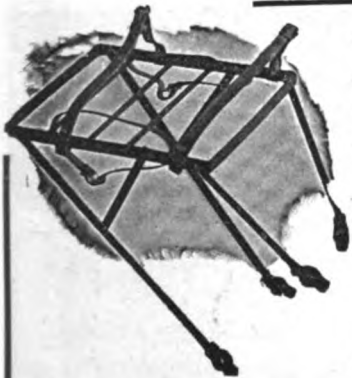
STANDARD PEDALS insure the utmost comfort for the feet. They have been in consistent use by the majority of motorcycle manufacturers for many years, and you can have them on your motorcycle if you insist on Standard Pedals.

Dealers—send for electrotypes and description of our line. It is well worth handling.



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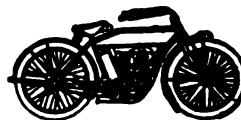
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Here's the ideal luggage carrier. Built scientifically—can withstand considerably over two hundred pounds weight. Just the thing for tandem riding. Adjustable to all motorcycles.

The "Star" Luggage Carrier

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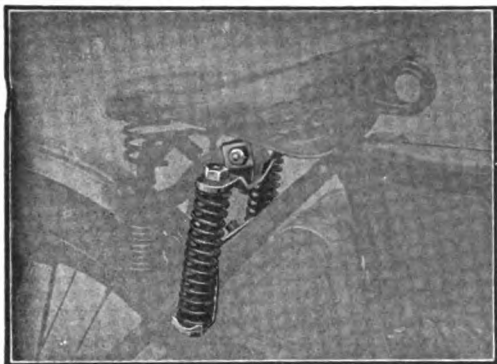
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Equip your motorcycle with a Y-A Shock Absorber "That absorbs the shock."

Make every ride a pleasure ride.

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Demand the only real "jolt-killer."

Refuse all make shifts they tell you are "just as good."

Made for Indian, Yale, Thor, Excelsior and Harley-Davidson.

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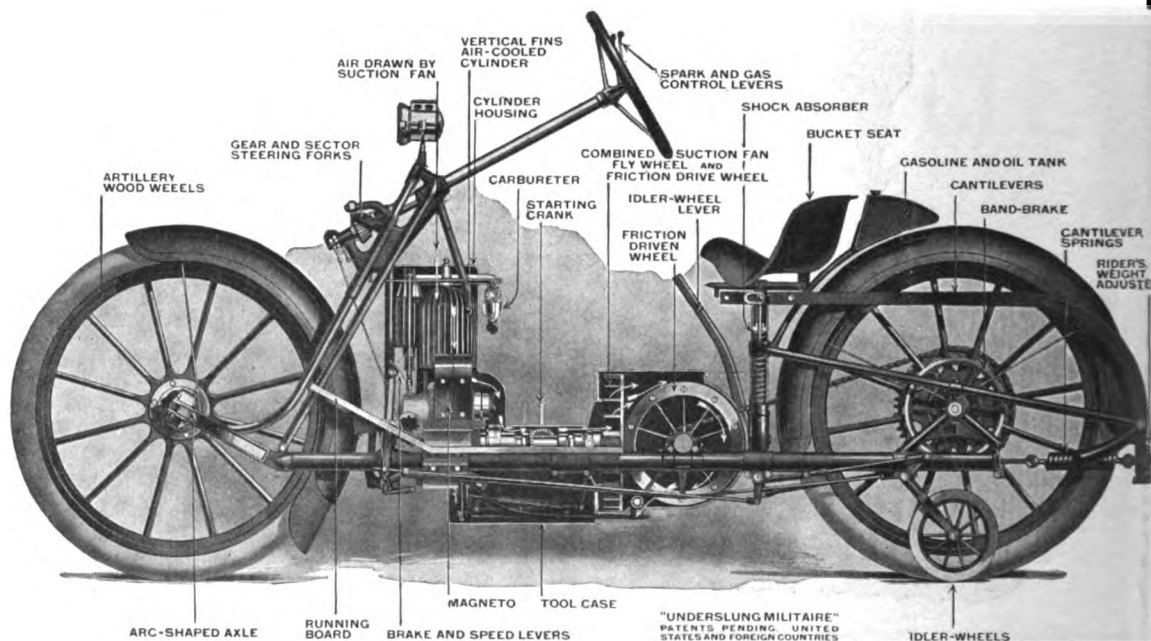
Give yourself a chance to learn more about

The "Militaire"

**THE
MILITAIRE
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(Inc.)

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for your motorcycle. Nothing too old, nothing too new for us to buy. We will buy one or a hundred.

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WHIPPLE THE MOTORCYCLE MAN, CHICAGO—Why!!! ("BECAUSE")
BECAUSE—Everybody says he is the best known MOTORCYCLE MAN.
BECAUSE—Longest in the business. **BECAUSE**—His patrons are many.
BECAUSE—His friends are numerous as his patrons.
BECAUSE—"A square deal to every man" (T. R.).
BECAUSE—HIS LONG SPECIALIZED MOTORCYCLE EXPERIENCE, his immense stock of MOTORCYCLES and supplies, courteous treatment and splendid equipment have enabled him to satisfy and please.
BECAUSE—He is responsible and safe to trust. Get acquainted with
WHIPPLE THE MOTORCYCLE MAN,
WHIPPLE MOTORCYCLE BUILDING, 1227 West Jackson Boulevard, Chicago.

The New "N. A." BREEZE

Delivers a larger volume of properly mixed gas than any other motorcycle carburetor in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

At over 3,500 revolutions it is just as effective.

All air ports have been enlarged.

A perfect mechanical device to increase gasoline supply automatically with the opening of the throttle has been fitted.

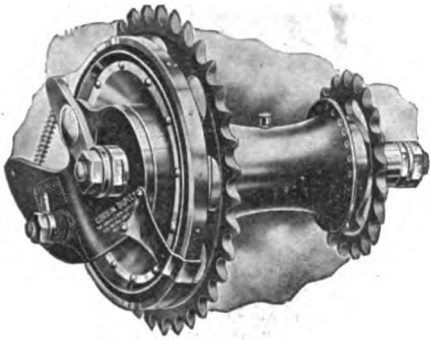
Send for free catalog. Our Engine Trouble Text Book, 54 pages, will be mailed for 10 cents.

BREEZE CARBURETOR CO., Newark, N. J.



When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

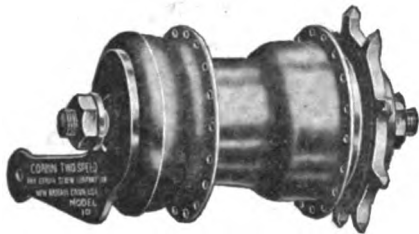
THE CORBIN LINE OF BRAKES AND HUBS



Corbin Band Brake

FOR MOTORCYCLES

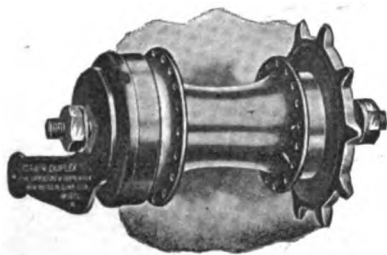
Nearly 50 per cent. of all motorcycles made in America today are equipped with this brake. The 1913 model has two important improvements; a nut-lock is formed by two projections on the end of the arm connecting band, securely holding the nut from turning or jarring loose; a bracket attached to the lower side of brake arm keeps the band from dragging on the drum or sagging when expanded.



Corbin Two-Speed Coaster Brake

FOR BICYCLES

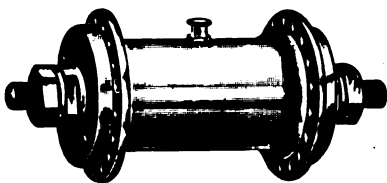
Invaluable for riding in hilly country or against strong winds. No levers or wires are required to change gear. All parts contained within the hub. Action is automatic. Operated by the pedals. Very simple, strong and reliable. Wide choice of gear combinations available. This brake is a great assistance to elderly riders.



Corbin Duplex Coaster Brake

FOR BICYCLES

Combines free wheel feature with foot-brake action. Operation can be graduated according to the amount of foot pressure applied. Instantaneous action and release. Small and handsomely shaped. Strong, efficient and durable. The best designed and most satisfactory coaster brake without two-speed feature.



Corbin Front Hub

FOR MOTORCYCLES

One of the most practical and efficient hubs made. Ensures free and smooth running. Best steel ball bearings. Knockout axle combined with this hub. Heavy, strong and reliable.



Corbin Front Hub

FOR BICYCLES

Very efficient, ball-bearing hub. Strongly and simply made. 32 and 36 spoke holes in stout cones. The standard bicycle front hub of the world.

Corbin Bicycle Brakes and Hubs can be fitted to your wheel by any bicycle repair shop.

For Sale by Dealers Everywhere

Send for New 1913 Catalog

THE CORBIN SCREW CORPORATION DIVISION

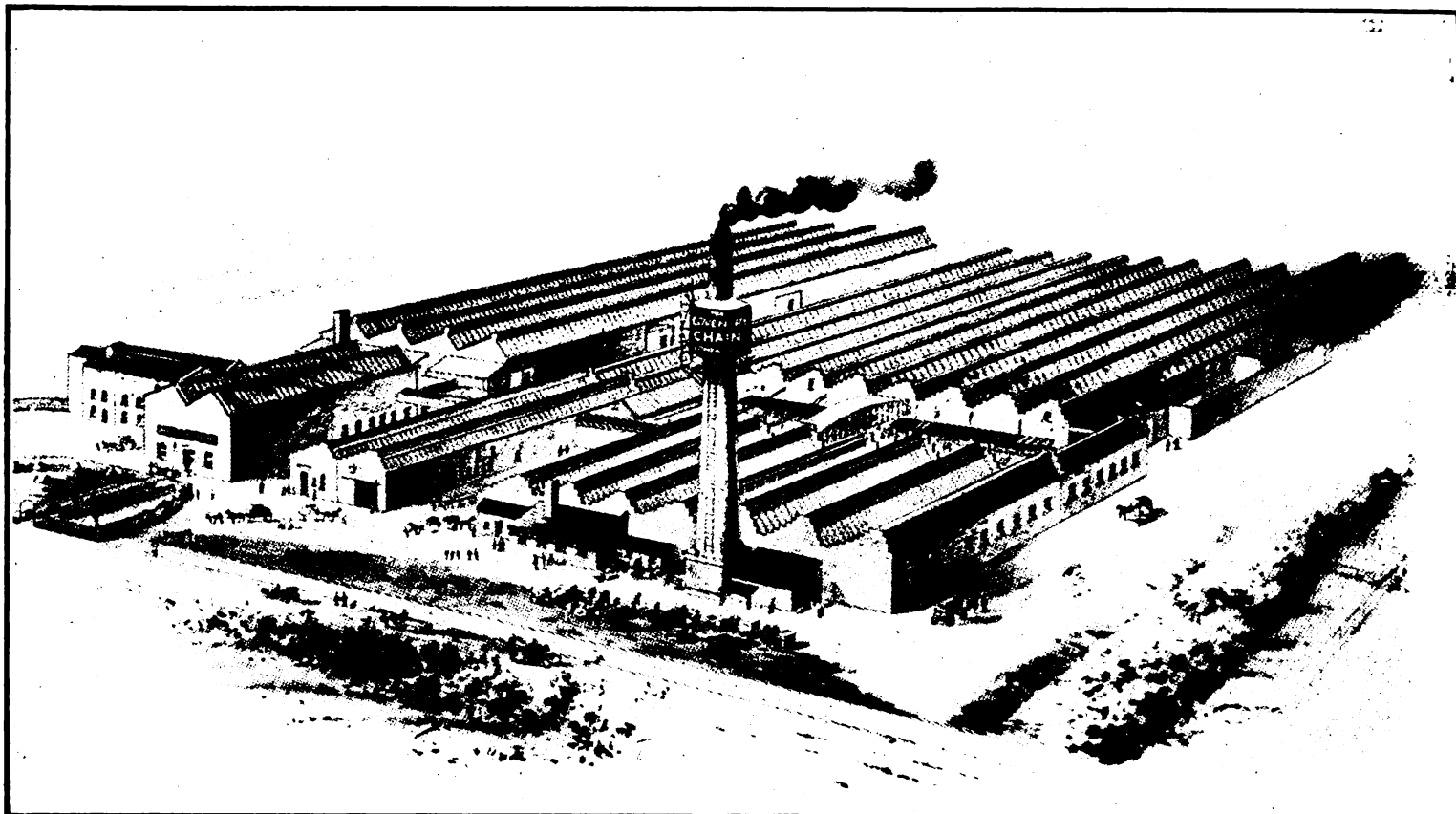
(THE AMERICAN HARDWARE CORPORATION)

WESTERN OFFICE
65 West Lake St., Chicago, Ill.

NEW BRITAIN, CONNECTICUT

Licensed Coaster Brake Manufacturers

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THE HOME OF "THE COVENTRY" CHAINS

EFFICIENCY!

Perfection in materials, in workmanship—these make for that one attribute which interests the user most—Efficiency in action. And that's where

"The Coventry" Chains

have time and again demonstrated their supremacy.

Combine practically limitless capacity with manufacturing facilities "tightened" down to the last possible unit of efficiency, and you have the basic reason for the uniformly high quality of "The Coventry" Chains.

*Let us tell you more
about them*

Sarco Engineering Co.
112 Broad St., N. Y.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



“It Makes Us Laugh!”

IT IS TO CHUCKLE! The childish efforts on the part of the makers of another type of transmission to stem the onrushing popularity of the chain-drive as the logical 1913 transmission, awakens in us nothing but deep, heartfelt and sincere amusement.

IN THEIR DESPERATE ATTEMPTS to ward off the inevitable they have committed the lamentable error of grossly under-estimating the intelligence and discrimination of the motorcycle public at large. They have frankly intimated that the rider doesn't know what he wants!

THEY PRATE ON ALIGNMENT, economy, on shocks and jars. Is it possible that they think so little of the rider's common sense as to attempt to make him believe that a transmission that continually slips and gives—a transmission that loses about 160 feet every minute through slippage—not to mention the wasted gas and oil as well as the wear and tear on the motor—is more **economical** than a positive chain drive—a drive which transmits **all** the motor's power with no waste whatever of gasoline or lubricant, and drives the machine farther with every revolution?

IT'S REALLY FUNNY.

THERE'S A PRINCIPLE IN engineering which provides that the smaller the leverage on a fixed point, the harder it is to move that point. For instance, if you were asked to pull the rear wheel of a chain-driven motorcycle out of line, you'd grasp the wheel by the tire rim, wouldn't you? You wouldn't be foolish enough to try and bend that wheel out of line by grabbing the chain sprocket. Of course not! It's easier to bend the wheel nearer the top. You get more leverage. Think this over carefully, and then ask yourself if the chain-driven motorcycle is the easiest to get out of line.

AND THEN THAT INFANTILE prattle about the chain being a harsher transmission! We appeal to your sense of humor. Obviously, in their estimation, the **FREE ENGINE MULTIPLE DISC CLUTCH** is only an ornament! They carefully overlook the fact that the Multiple Disc Clutch absolutely absorbs all transmission shocks; that the rider of a chain-driven motorcycle today can, with the aid of the Clutch, start and control his motorcycle as slowly, smoothly and flexibly as he would an automobile.

WE HAVE AT OUR command “harsh,” solid, substantial figures; figures which conclusively prove the chain's superiority over any other form of transmission yet devised. But the best proof of all is that election returns for the 1913 transmission show an overwhelming majority for the chain—the leading manufacturers' specifications show it, and certainly the most successful and the largest manufacturer of motorcycles in the World, the Hendee Manufacturing Company would not equip its entire output of 35,000 motorcycles with chains if it were not convinced of the chain's undoubted superiority.

Can't we afford to laugh?

Sarco Engineering Co. 112 Broad St., N. Y.

TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4	\$6.05	28 x 2 1/2	\$7.43	29 x 2 3/4	\$8.15
26 x 2 1/2	6.60	28 x 2 3/4	7.70	29 x 3	8.25
28 x 2 1/4	7.15	28 x 3	7.98		

Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. Bricton,
President,
The Bricton Mfg. Co.,
25112 Bricton Bldg.,
Brookings, So. Dak.
Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

Name.....
City..... State.....
County.....

O. A. BRICTSON, President
The Bricton Mfg. Co.
25112 Bricton Building
Brookings, South Dakota

O. A. Bricton,
President,
The Bricton Mfg. Co.,
25112 Bricton Bldg.,
Brookings, So. Dak.

Enclosed please find.....

in the sum of \$.....for which

ship by ex. or fgt.....(quantity).....Bricton

Motorcycle Treads, size.....with the understanding if they are not perfectly satisfactory I may return them within 10 days from receipt of shipment and you will refund my money.

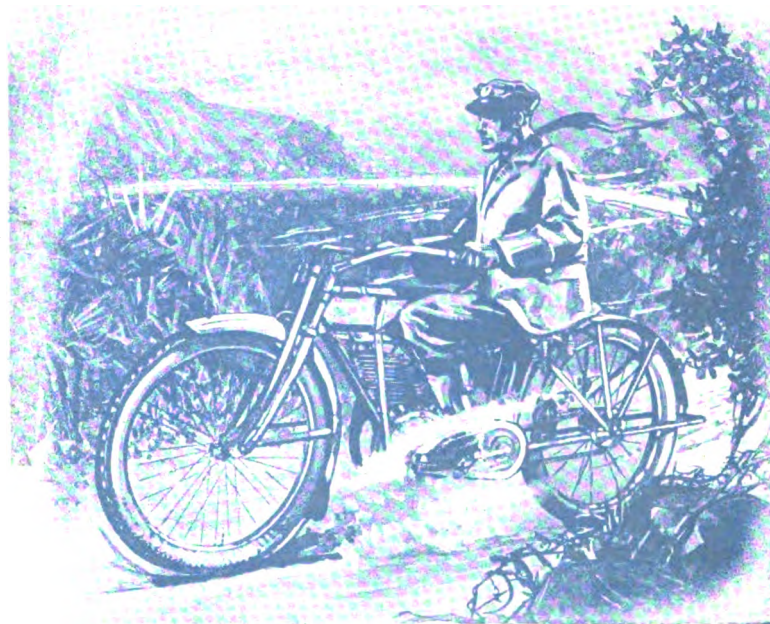
Signed.....

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The Yale for 1913

A MOTORCYCLE FOR CONSISTENT SERVICE



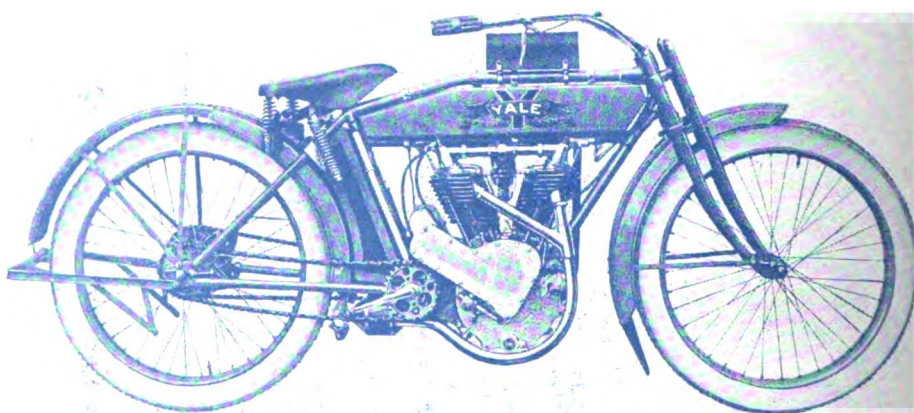
IN the 1913 models of the Yale are offered the most perfected motorcycles that have ever been produced. Price has been a secondary consideration in making the Yale, with every detail the very best that brains and skill can make it. As a result, the Yale must sell for a higher price than most other motorcycles, but the buyer's expense ends with the purchase price. There is no continuous aftermath of expense for repairs and replacements. A Yale sale makes a Yale booster, for the rider has such a good machine that he can't help talking about it. He paid a fair price for quality and got surplus value for his money.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

A Big 5-6 Single and a 7-8 h. p. Twin

ALL the energies of our big factory organization are to be concentrated on just two models for 1913. One is a big 5-6 horsepower single-cylinder, the other a powerful 7-8 h. p. twin. All machines will be regularly equipped with three-inch tires—the same size that is used on automobiles that weigh 1,000 pounds more.

The famous Y-A shock absorber is furnished to eliminate rear-wheel jars, and the Eclipse free-engine clutch is standard on all Yales. It is the most thoroughly tried and satisfactory device of the kind that is made.



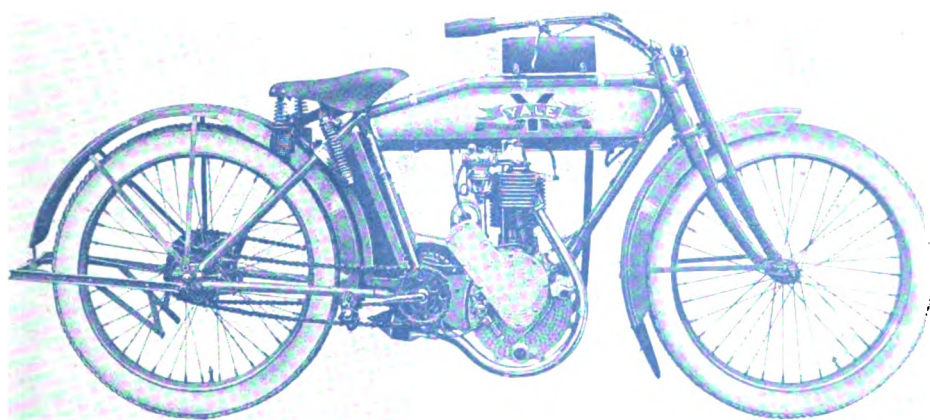
New twin Yale, with two-cylinder motor of 61 cubic inches piston displacement. Heitger improved carbureter. Bosch armored magneto. Eccentric yoke allowing independent adjustment of pedal chain and belt or drive chain. Three-inch tires, Goodyear, U. S., Federal, or Diamond, with big clearance to permit use of chains and prevent clogging with mud. Hinged mudguard makes easy removal of rear wheel. Wheel-base 57½ inches. Troxel or Persons saddle. Y-A shock absorber, "the original jolt-killer." Yale triple-stem spring fork with forksides extending all the way up and connected to handlebars by substantial forging. Yale grip control, with independent exhaust lift from lever under right grip, giving more perfect control of motor. Spark and throttle stay where set when hand is removed from grip. Standard rims with extra heavy spokes, 38 front, 40 rear. All frame fittings are drop forged—no cheap stampings or malleable castings to give way under hard strain.

Gas is furnished to the cylinders by a Heitger carbureter made especially to suit the requirements of Yale motors.

Every single item from motor down to spokes is absolutely the best that expert mechanics can make or money can buy. There has been no skimping and no sparing of expense to make Yale quality mean perfection.

Twin Power with Simplicity of a Single

THE new 5-6 h. p. Yale is the first machine to meet effectively the demand for the immense power, rapid acceleration, and hill-climbing ability of a big twin combined with the mechanical simplicity and freedom from complication of a single-cylinder. Though containing so few parts and so simply made that anyone



The new 5-6 Yale single is unequalled for all-around service. The highly efficient long-stroke motor develops close to 6 H. P. and is so simple that it is practically impossible for it to get out of order. Aside from the motor this is the same as the twin—same substantial frame, graceful lines, three-inch tires, big mudguard clearance, hinged mudguard, Y-A shock absorber, and Eclipse clutch.

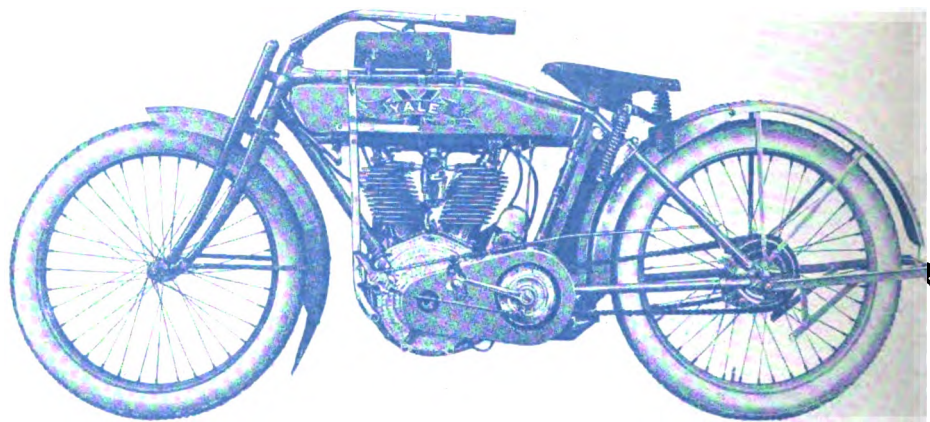
can learn to handle it in a few minutes, the new "Big Y" single has power that shoots it up the steepest hill without hesitation, and the way it plows through deep, sticky mud or heavy sand is a revelation to the man accustomed to the old 4 h. p. models. Also, the far greater power

that this new motor exerts at low speeds allows the rider to travel slowly through sand, or in "ticklish" situations such as a sharp turn on a steep hill, without danger of stalling the motor.

For the new rider who wants a machine that he can handle perfectly without previous practice or for the veteran who wants a motorcycle with invincible power but free from the troubles he has met in other machines, the Yale single is the solution.

A 61-Inch Twin of Supreme Efficiency

THE power plant of the Yale twin model has proved itself the most efficient gasoline motor ever put in a road machine. For power, speed, flexibility and perfect evenness of running this has never been approached. It is rated conservatively at 7 horsepower, but on actual test with instruments of most precise accuracy, these Yale twins average 9.2 horsepower—some of them pull considerably above this. There is power to climb with the speed of a rocket the steepest grade that you will ever meet. The rider of a Yale twin need take no one's dust on the road, for at his command

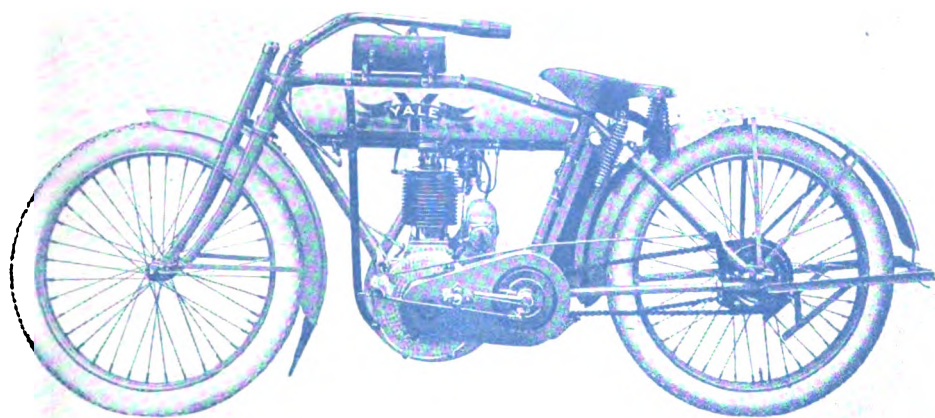


Showing the left side of the big twin with chain drive. The Eclipse clutch is located on the counter-shaft, where it gives smooth, efficient action, superior to any other location. Drive by chain or V belt, with Eclipse free-engine clutch operated by lever on left side, which engages clutch as it is drawn back. Quadrant for lever fastened to lower frame bar—no strain on side of tank. New footrests shown, with foot lever for operating brake when feet are on rests. Choice of Corbin band or Eclipse multiple-disc brake.

is greater speed than anyone dare use. The nerve and skill of the rider is the only limit to the speed of a Yale twin. Yet for city riding or leisurely traveling, the motor will throttle down to a walking pace, and will fire evenly and sweetly at 4 miles an hour. The horizontal cooling flanges let the air circulate directly across both cylinders, so that the motor cools perfectly at all speeds, even when the engine is raced with the clutch partly disengaged and the machine moving slowly for some time, as when negotiating a long stretch of sand.

Superior Balance and More Road Ability

YALE riders are able to use the power of their high-efficiency motors and can maintain a greater speed over all kinds of roads than other motorcyclists because the balance and "hang" of the machine is so perfect that it is far easier to handle. The new frame lines give an exceptionally low saddle position, well



Drive side of the big 6-6 Yale single with chain drive. Eclipse clutch on countershaft, with positive lever control. Clutch engaged when lever is pulled back; free in forward position. Footrests with auxiliary foot lever to operate brake. Brake can be applied either by back-pedaling as usual or by pressing auxiliary foot lever when using footrests.

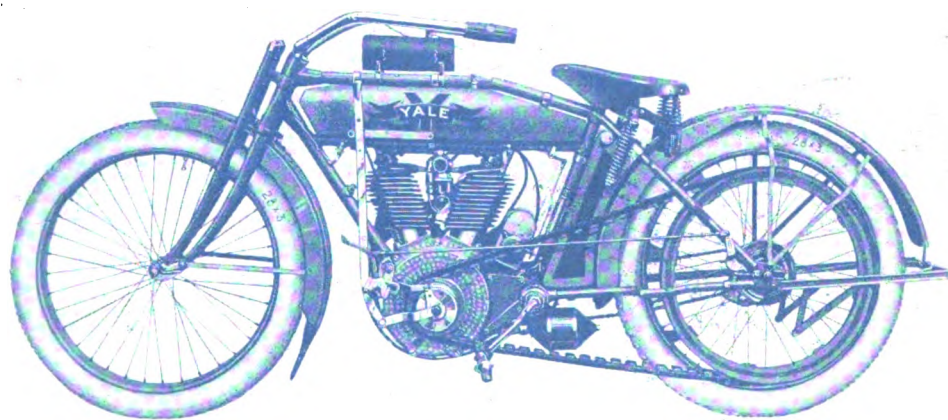
forward between the wheels, and the motor is hung so that the center of gravity comes very low, without sacrificing road clearance. All strains are taken along straight lines, so that there is no chance for bending or breaking, the Yale frame tubes, with double

D-tube reinforcements forming a central wall, making a frame immune to all strains a motorcycle ever receives.

Also, note the lines of the new Yale. It is the raciest, classiest, most competent-looking machine in the field, both for lines and finish. And it continues to look good, for all nickelplating is on copper so that it does not rust, and the enamel is of a quality that low-priced machines cannot afford. It wears long, holds its color, never chips off, and does not fade or grow dull after long service.

Quality First Requirement of Yale Policy

QUANTITY with a big Q is the first requirement on every part of every Yale machine. Design, material, workmanship—all are the very best that ingenuity, experience and skill can supply. After making the 1913 Yale absolutely the best that a motorcycle can be made, we figured what it must



One of the belt-driven 1913 Yales. On the single cylinder model there is choice of chain or flat belt. The twin has chain or a big V belt—no flat belt of size suitable for a motorcycle would hold this powerful motor satisfactorily. Both belt and chain models have the Eclipse free-engine clutch as regular equipment.

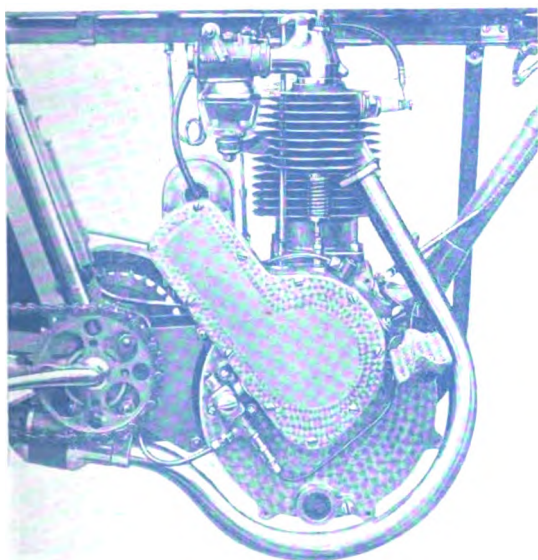
be sold for, instead of setting a low selling price and then making the quality of the machine measure down to that mark—using low grade material and cheap labor to keep down cost so that a profit could be made selling at a low

price. Our policy makes the Yale prices somewhat higher than those of several other machines—but it gives the man who buys a “Big Y” a great deal more for his money. When he pays for a Yale his expense is ended. He does not have to pay in repair bills many times the amount that a cheap maker saved by cheap construction.

Sterling silver costs much more than plated ware, but everyone admits its value is greater. The same is true of Yale motorcycles.

Sales Ammunition for Yale Dealers

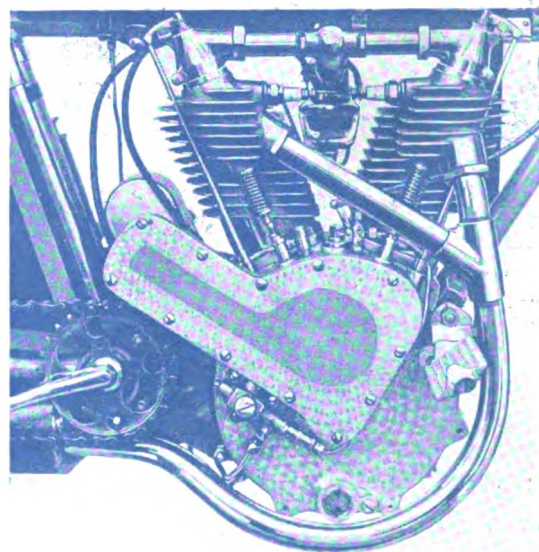
NEVER before have any motorcycle dealers been provided with such sales ammunition as we are furnishing Yale dealers for 1913. The "Big Y" is a motorcycle without an equal, the greatest value per dollar invested offered to the buyer, and the Yale is hammering this fact home to millions of people all over the country by the most tremendous campaign of national advertising that any motorcycle maker has ever attempted. No other maker has cared—few could afford—to put \$125,000 into a series



Valve side of new Yale single-cylinder motor. Develops nearly 6 H. P. Improved Heitger carburetor. Inclosed Bosch magneto. New mechanical oil pump of plunger type. Auxiliary hand oil pump. Mechanical inlet valve, with separate cam for independent timing. Big bearings with bushings of special metal.

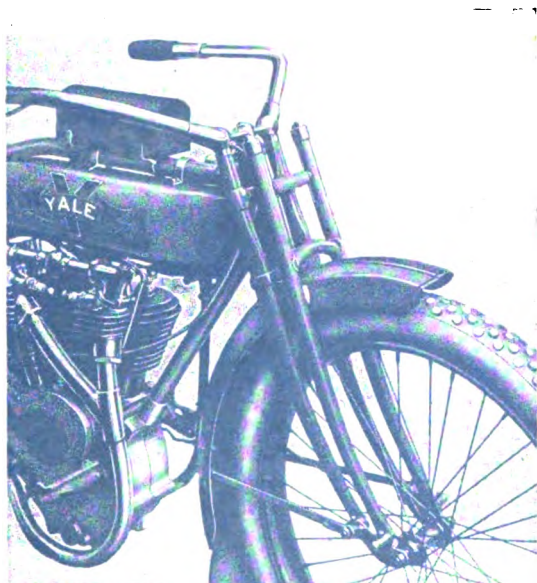
of smashing page and double-page ads in the Saturday Evening Post to bring the motorcycle up to the automobile in public esteem and to drive the great masses of people who need motorcycles to the stores of the dealers. But the Yale is doing it. The Yale has the money, and has the faith in the future

of the motorcycle to put this money to work for the dealers. The Saturday Evening Post campaign is succeeding wonderfully. The first big double-page of the series, published Oct. 19th, is still bringing results in a steady stream. That big ad will make itself felt at the stores of Yale agents all over the land for months to come, and in the meantime other big advertisements of this series will be issued, and will be bringing more business to the dealer. Advertising of this sort is cumulative as well as direct in effect, and each ad will be stronger because of those that have gone before, so that the stream of business coming to the Yale agent will be constantly broadening and deepening.



Valve side of the Yale twin motor. The most efficient engine made. Bore, $3\frac{1}{4}$ inches; stroke, 3 43.64 inches. Piston displacement, 60.92 cubic inches. Develops 9.2 horsepower on block test—not "calculated" or "estimated" power. Improved Heitger carburetor designed specially to fit requirements of this motor. Inclosed Bosch magneto on all motors. Lubrication by new worm-driven mechanical oil pump of plunger type that supplies oil in proportion to speed. Hand pump for emergencies or speed work. New mechanically-operated inlet valves with overhead rocker arms and pushrods. Exhaust and inlet cams separate, allowing independent and accurate timing. Horizontal cooling flanges, so that air circulates freely over surfaces of both cylinders instead of being deflected by front cylinder and allowing rear to overheat—an exclusive Yale feature. All bearings of unusual size, giving long life and freedom from friction. Bushings for bearings made of special bearing alloy that is proved by test to wear longer and run smoother than any other kind.

Yale Agency a Chance for Big Business



The Yale spring fork made an unequalled record for service in 1912. Not one single fork was broken. The substantial way this fork is made, with forgings used at all points of strain, accounts largely for its superiority. For comfort and ease of riding this fork is a wonder. It smoothes out all the road bumps and cuts out front-wheel jars. The slant of the front fork is so designed that there is a trailing effect, and the wheel passes over bumps and obstructions more easily and with less shock than in a fork of the castor type where the axle is back of the fork tips.

HOLDING a Yale agency means a chance of big business. Backing the agent for the "Big Y" is the powerful sales and advertising organization of the Consolidated Manufacturing Co. Without spending a cent the agent reaps the benefit of the company's tremendous \$125,000



All Yales are equipped with the famous Y-A shock absorber, "the shock absorber that absorbs shocks." Two big springs take up every road jar, large or small, thoroughly insulating the rider from all effects of rough roads. The design absolutely eliminates side play, which makes a machine with the ordinary spring seatpost hard to handle in difficult situations. There is none of the weakness that characterizes spring frames—no joints to wear and destroy alignment. The Y-A shock absorber is the most successful device yet made to smooth out all rear-wheel jolts.

campaign of national advertising. His success is assured beforehand, he has not a chance for failure—not even a chance for merely lukewarm success. Yale agents for 1913 will do big things, will succeed in a big way, for that is the Yale method now. We are going to keep on with our immense publicity work, for already it has shown astonishingly big results. And the Yale agent is the man who will gain most directly by this. Prospective buyers will be brought into the store without an effort on the agents' part, with the desire to own Yale motorcycles already created in their minds, and closing the sale will be easy for a salesman who is at all alive to his opportunities. And for 1913 we want Yale agents to be 100 per cent. live wires. The few who do not measure up to this standard will be replaced with men who are wide awake.

If you are not already a Yale dealer, think this over. You cannot afford to let anyone else sell the Yale in your territory. Possibly you can arrange to represent us there. Write us at once and find out. Our proposition interests all real hustlers.

The Consolidated Manufacturing Company

1730 Fernwood Avenue

Member M. M. A.

TOLEDO, OHIO

F. C. CORNISH, Eastern Representative, 219 Clinton Avenue, NEWARK, N. J.

Make your motorcycle a 24-hour servant

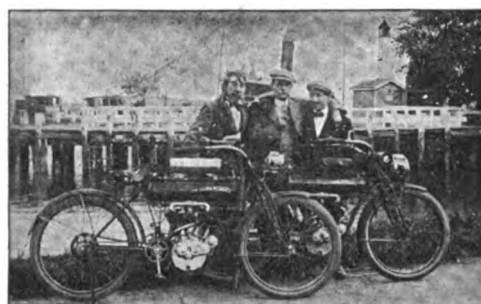
Dare you ride your machine any time and place you please? Or does nightfall catch you worried and anxious, creeping along in fear and trembling?

If so, you're missing most of the fun of motorcycling—you're tied down to the daylight limit.

But—a **RELIABLE** source of light, with a lamp large enough, will make your night riding pleasant and **SAFE**.

Oil lamps won't do—gas generators won't fill the bill either—they're unreliable and troublesome. What you need is a brilliant, unflickering light, that floods the road ahead, searching out every bump, rut, puddle and other source of dangerous spills.

Prest-O-Lite Owners



Several motorcyclists who appreciate the never-failing Prest-O-Lite Motorcycle Gas Tank. Reading from left to right: Michael Westcott, R. O. Shelling and C. D. Feiler; taken in Delaware City, Delaware.

HERE'S THE ANSWER!

Prest-O-Lite Motorcycle Gas Tank

This is your only source of satisfaction—because it's the **only PRACTICAL** lighting system for motorcycles.

It means a **brilliant** and **RELIABLE** light for you—steady under all road conditions. Turns on and off like a gas jet. The neat, attractive nickel-plated Prest-O-Lite Tank will add to the beauty and service of your machine, without adding materially to the weight.

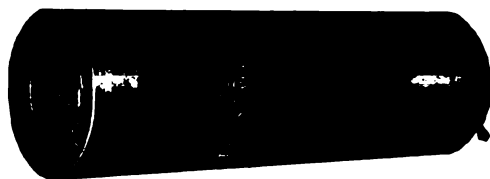
Prest-O-Lite is not expensive. The money you invest in the tank itself is not *spent*, because a genuine Prest-O-Lite Tank never becomes second-hand, is always in demand—it's a ready cash asset just like money in the bank.

And any experienced rider will tell you that Prest-O-Lite exchanges cost no more, usually less, than the carbide to feed a generator. Wherever you may be, exchange service can be had from one of our 20,000 dealers (motorcycle and automobile). We will arrange for prompt exchange service for anyone anywhere.

You shouldn't deprive yourself of the added pleasure and convenience Prest-O-Lite will give you. You can't afford to do without its **SAFETY**. One accident due to poor light will cost you more than a year of Prest-O-Lite service.

Price of Tank \$10

(Equipped with Gauge)



Dimensions: Length, 13 $\frac{1}{4}$ inches; diameter, 4 inches; weight, 8 $\frac{3}{4}$ pounds. 40 hours of light. Easily attached to any motorcycle.

Just a Word on Imitations

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one, **ANYWHERE** and **ALWAYS**. Imitations cannot.

The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

The Prest-O-Lite Co. 246 E. South St.
INDIANAPOLIS, IND.

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

Mr. Dealer! There's a good profit in Prest-O-Lite Tanks and Exchanges. You may as well be getting it, for a simple statement of the facts about the Prest-O-Lite Motorcycle Tank will make the sale. And remember it's a bad idea to get your customers into the habit of going elsewhere for their Prest-O-Lite Exchanges if you want their trade on other things.



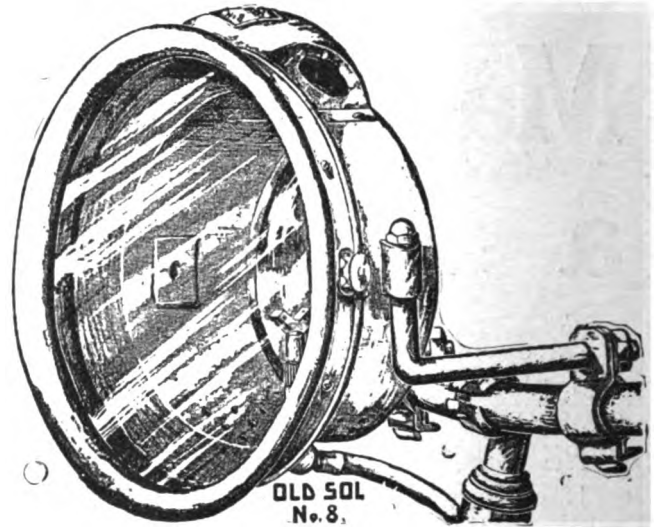
Before Mr. and Mrs. Gale started on their eventful transcontinental trip they debated long and earnestly on what tires to use. After drawing upon his years of experience as a motorcycle rider, Mr. Gale emphatically voted in favor of

CONTINENTAL-ERIE TIRES

That their choice was a wise one has been proven by the triumphant completion of their journey through every imaginable road and weather condition, all of which Continental-Erie Tires went through "with flying colors."

Dealers—Get our 1913 proposition.

Continental Rubber Works
Erie, Pa.



"Old Sol" No. 8

This is the "daddy" of the "Partners to the Sun" line. It has achieved for itself a reputation which might well be envied. We cheerfully admit that "Old Sol" No. 8 is heavier than the usual lamp. Otherwise it would not be

**the largest, the strongest
and most durable
motorcycle lamp made.**

We want the doubters to take a night trip behind a motorcycle equipped with an "Old Sol." The sense of safety, of surety which that broad beam of 1500 candlepower light affords will be a sensation new to you. Learn it. Your catalog is waiting for you to claim it.

Hawthorne Mfg. Co.
Bridgeport, Conn.

OR

POLLOCK MFG. CO., Ltd., Berlin, Ont., Canada

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

HERZ PLUG

"Bougie Mercedes"

is altogether different from ordinary Plugs. Its superiority is "built in"—perfectly apparent in *every* detail of materials and construction. That is why HERZ PLUGS can be

GUARANTEED A FULL YEAR

The stone insulation does away with cheap, cracking porcelain. The electrode will not burn away. The four sparking points ensure a hot spark every time.

HERZ PLUGS can be relied upon under all sorts of conditions. Use HERZ MAGNETO with HERZ PLUGS—the ideal ignition system.

Self-Cleaning

Motorcycle
Type

\$1²⁵

Double-Stone

**Four
Sparking Points**



**Platinum-Alloy
Electrode**

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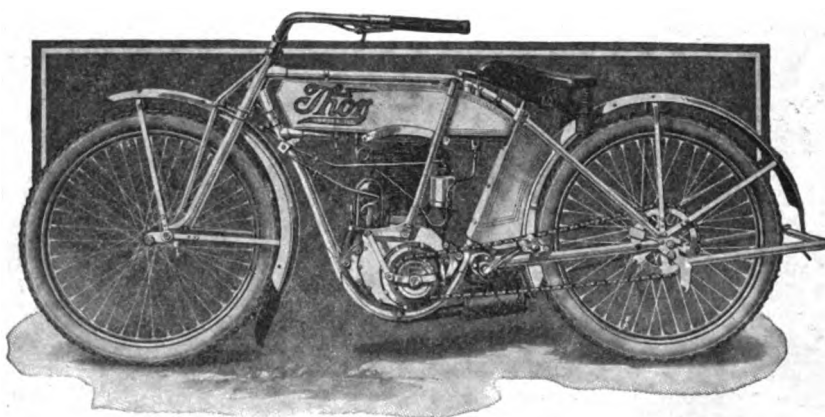
1913

Thor

1913

It has been universally acknowledged by the motorcycle world, manufacturers, dealers, and riders alike that the THOR motorcycle manufactured by the AURORA AUTOMATIC MACHINERY COMPANY, Aurora, Illinois, is the most complete, mechanically perfect motorcycle ever manufactured. While we have never been able to keep up with the unusual demand this past year, we can safely say every motorcycle turned out of our factory is absolutely perfect. It is honest all the way through, both material and workmanship. It is built to give credit to the name THOR and the designers back of it.

This coming season the main question is DELIVERIES. Realizing the importance of this question—so important—as has been proven this past year we commenced active operations in completing and testing 1913 sample models last July. We immediately placed contracts, orders, etc., for our product and have today over \$300,000.00 worth of raw material in our warehouse and factory, half of which is in actual productive operation. This fact alone will prove to you we intend manufacturing motorcycles, and the THOR will hold its place as the FIRST MOTORCYCLE in the World and the FATHER OF THEM ALL.



Model "13-M" \$225.00

This 4 H. P. model is the fastest single cylinder ever manufactured. This is even faster and more powerful than our previous models of same size.

Bore, 3.25; Stroke, 3.00; Displacement, 30.50 cubic inches. Roller bearing connecting rods; Mechanical overhead intake valves with Thor ball and socket joints; Carburetor; Thor improved twin air adjustment and butterfly valve; Bosch armored magneto; Thor undergeared internal gear direct chain drive; Thor improved ball bearing free engine clutch; Wheel base, 58 inches; Control, Thor improved double grip positively perfect at all times. Standard tire equipment, 28x2½, United States, Goodyear, Empire or Diamond. Motor is mechanically oiled with the new Thor perfected force feed, oiling crank case direct. Two Speed and Two Speed Control, \$40.00 additional to above.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

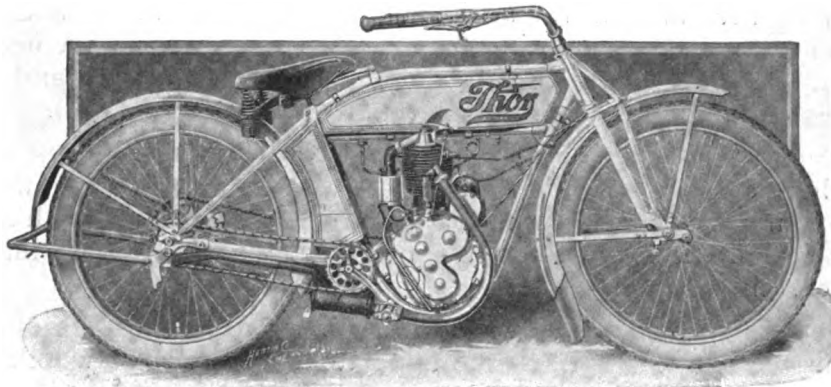
1913

Thor

1913

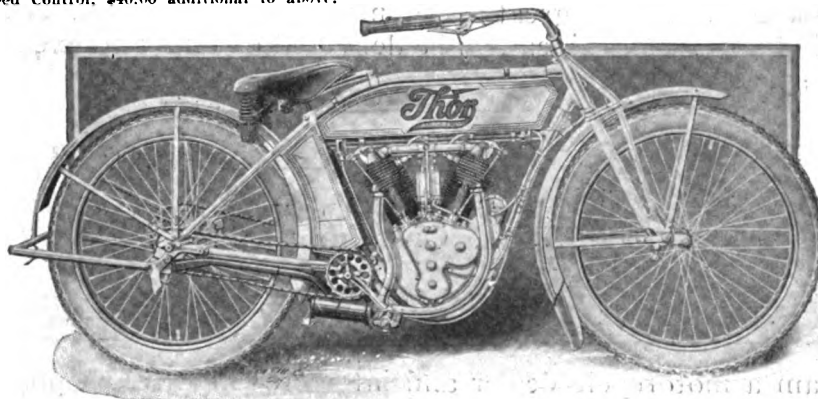
Our 1913 models are especially prominent owing to superior quality and interchangeability. THOR Quality applies both to material concerned and workmanship performed. The best material which can be purchased, both in this country and abroad, alone is used. The quality of work performed on the material is only of the highest type.

The organization which makes THOR superiority possible consists of competent corps of engineers, who have at their disposal laboratory apparatus for research work, such as is seldom found in motorcycle building factories. Only such machinery as is recognized in the trade to be the best for the purpose, including many special machines, is employed and operated by expert mechanics to whom we attribute our success.



Model "13-W" \$240.00

For the rider wishing a motor of tremendous pulling power on slow speed but capable of speeding up when desired—a better motor can not be made. This 5 H. P. Motor with Bore, 3.57; Stroke, 3.80; Displacement, 38½ cubic inches. This motor is also roller bearing throughout. Standard tire equipment, 29x2½, otherwise the same improvements throughout as the 4 H. P. Special attention is called to the larger cylinder; larger radiating fins and exhaust chamber, thus eliminating all possibility of overheating. Two Speed and Two Speed Control, \$40.00 additional to above.



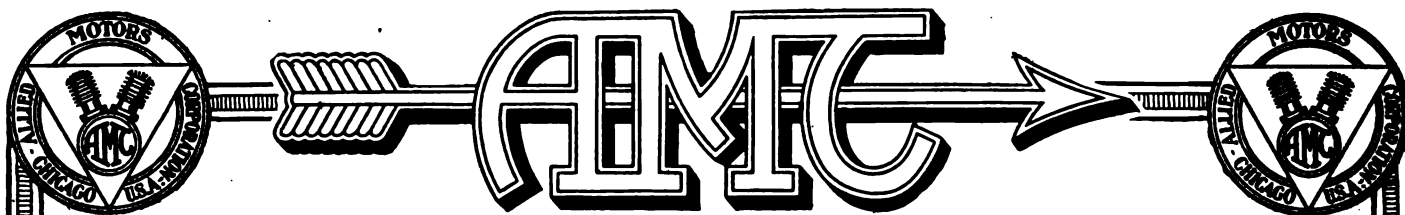
Model "13-U" \$290.00

The most perfect and fastest stock twin in the world, unlimited power and speed. This 7 H. P. Motor with Bore, 3.25; Stroke, 3.60; Displacement, 61 cubic inches. Cylinders are set upright 50 degrees apart. This motor is also roller bearing throughout. Standard tire equipment, 29x2½, otherwise the same improvements throughout as the 4 H. P. The improved clutch on this model is just what is wanted on this high power machine. Two Speed and Two Speed Control, \$40.00 additional to above.

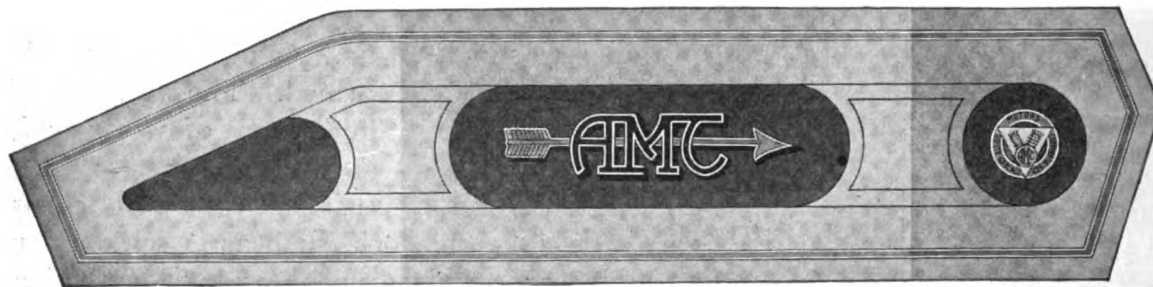
Aurora Automatic Machinery Company

General Offices: Thor Bldg., No. 1307 Michigan Ave.
Chicago, Illinois

Works: Aurora, Illinois



The best built Motorcycle in America.



The A-M-C is a real 1913 model from start to finish, but its designers are among the oldest in the business. In building the A-M-C there has been no necessity for adhering to former features. We have been entirely free (and frankly admit having done so) to copy the best and time-tried features embodied in the highest type of machines of both Europe and America. Its up-to-dateness is reflected in every detail.

The refinement and harmony of lines removes the influence of ordinary motorcycle construction and the A-M-C comes forth as the final expression of the most attractive and mechanically correct machine for next season.

Dealers who handle the A-M-C will make money—be one of them. Perhaps we can arrange it—the opportunity is at least worth a wire or special delivery letter.

Contracts are now being closed—you will have to hurry. If you are now handling motorcycles and not considering a change it will do you good to get our proposition anyway. We have what you will consider, and we know to be, the greatest selling line of motorcycles in the history of the industry. Machines will be delivered on time; no excuses to offer or lost sales.

Allied Motors Corporation

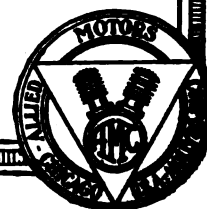
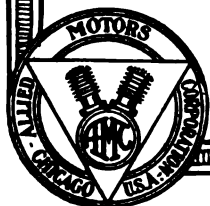
Union Park Place and Carroll Ave.
Chicago

HERE IS YOUR INVITATION

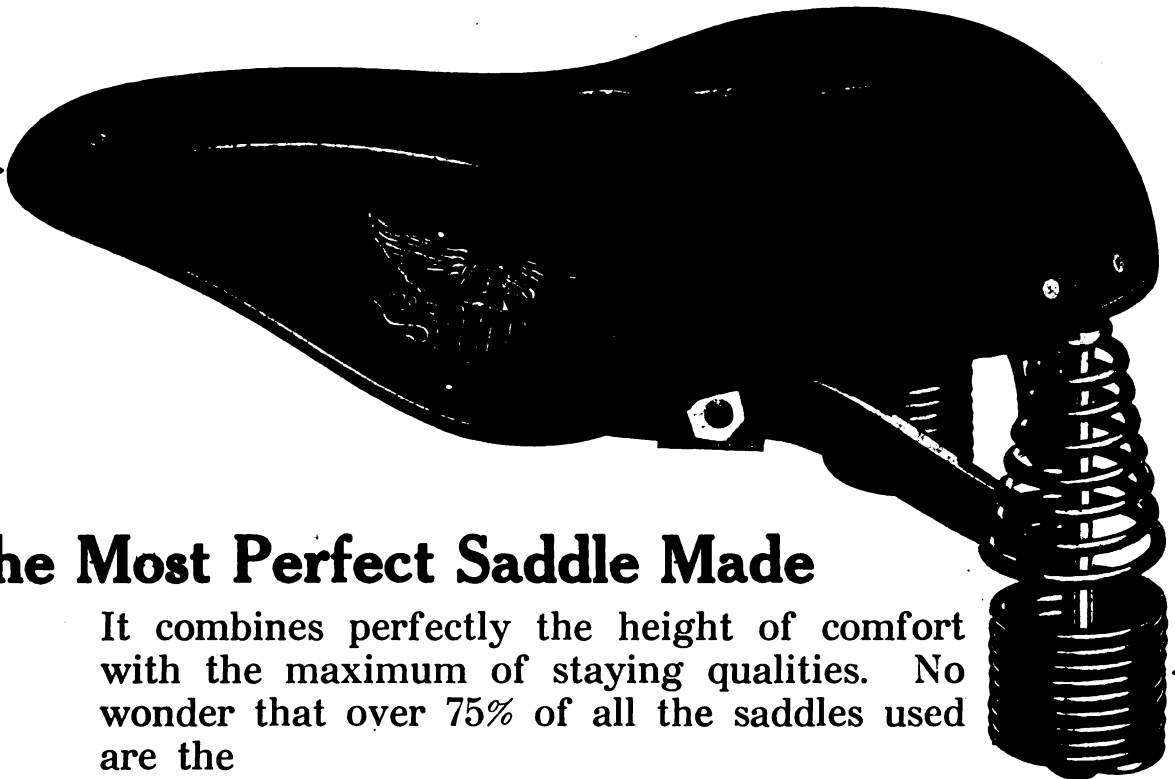
I am a motorcycle dealer and interested in a live proposition. It is up to you to show me.

Dealer's Name

Address



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



The Most Perfect Saddle Made

It combines perfectly the height of comfort with the maximum of staying qualities. No wonder that over 75% of all the saddles used are the

Troxel "No-Bump" Saddle

(Never Has Hit Bottom and Never Will)

ALL MANUFACTURERS OF HIGH-GRADE MOTORCYCLES USE TROXELS AS REGULAR EQUIPMENT. TEN MOTORCYCLE MANUFACTURERS WILL USE TROXELS EXCLUSIVELY.

Think a Minute

Practically every endurance rider of any seasoned knowledge and experience uses the Troxel "No-Bump" Saddle. For them Saddle Comfort plus "Saddle Endurance" are absolutely necessary.

Troxels are used more exclusively and more generally by motorcycle manufacturers than any other saddle. Isn't the saddle that has the endorsement of Veteran Endurance Riders, Tourists and Racers, and that has the discriminating selection of all the leading motorcycle manufacturers, the Right Saddle for you?

Specify then, the "No-Bump Troxel" and insist upon it

TROXEL MFG. CO.

H. T. ROBERTS, Selling Agent

Elyria, Ohio

538 S. Dearborn St., Chicago, Ill.

AMERICA'S GREAT MOTORCYCLE

Combines the 5 Great Elements which the most
Exacting Riders Demand

STRENGTH - SPEED - SAFETY SERVICE

To which is added those shock-absorbing, comfort-insuring features of construction which have made the EMBLEM Famous. The result is perfect satisfaction for rider and dealer.

EMBLEM SATISFACTION

We will not burden the reader with pages of technical description. Our big catalog gives that.

"PROOF OF THE PUDDING IS IN THE EATING"

PROOFS OF EMBLEM EFFICIENCY are found in the EMBLEM History Covering 8 Years of PROVEN, PROGRESSIVE PRODUCTION of MOTORCYCLES and BICYCLES.

RECORDS WHICH STAND OUT CLEAR

and unequaled among the motorcycle performances of the world. For instance

NEW YORK TO CHICAGO, 1050 MILES,
In 35 hours

NEW YORK TO DENVER, COLO.,
Carrying Two Passengers

MINNEAPOLIS TO BUFFALO
and back,
Carrying Two Passengers

The EMBLEM went
through. No trouble.
No breakdowns. Results
of these tests
crown the
EMBLEM
KING of the
ROAD

THE 1913 EMBLEM FAMILY

is

**STRONGER, SPEEDIER and more
SATISFACTORY than over**

DOUBLE FACTORY CAPACITY

Numerous refining, strengthening and comfort-insuring improvements contribute to make 1913 an EMBLEM YEAR.

MEMBERS OF OUR FAMILY ARE AS FOLLOWS:

4-H.P. SINGLE
Belt or Chain Drive. Battery Ignition

7-H.P. TWIN
Chain Drive. Magneto Ignition

10-H.P. TWIN
Chain Drive. Magneto Ignition

\$175 \$250 \$300

With Magneto Ignition, \$200

Mechanically operated inlet valves on all motors. All valve cams on same gear. Pneumatic cushion effect on spring fork.

Here's enough EMBLEM EFFICIENCY for all. There should be an EMBLEM dealer in your territory. There will be. For you, Mr. Rider, will sooner or later try an EMBLEM.

Once an EMBLEM Rider always an EMBLEM Enthusiast. Dealers are Emblemizing everywhere (BICYCLES, too). Write today before your competitor thinks twice.

EMBLEM MANUFACTURING CO.

ANGOLA, N. Y.

EMBLEM DISTRIBUTORS

FOR CALIFORNIA
John T. Bill & Co., Los Angeles

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Henry Kiedel & Co., Baltimore, Md.

FOR CHICAGO AND VICINITY
Brown-Music, 9119 Commercial Ave.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

**"YOU CAN SMILE AT
THE MILES OF OIL!"**

That's what you can tell your customers when you sell them the only one make of tires in the world that are immune from *oil disease*.

PENNSYLVANIA *Oilproof* VACUUM CUP TIRES FOR MOTORCYCLES

These are the tires to sell during 1913—the trouble-proof tires.

Well over 80,000 new motorcycles will be produced in this country the coming year. Add these to the thousands and thousands already on the road and think of the wonderful volume of tire sales!

It needs no great effort of the imagination to see that a huge bulk of these sales will and must swing over to the tire that's trouble-proof.

All PENNSYLVANIA Motorcycle Tires now on the market are Oil Proof. They resist the ruinous effects of oil which rots other tires by soaking into the pores and small cuts from oiled roads and streets. The tread has been toughened in the treatment. It's practically a puncture proof tire.

All this is added to the sensational anti-skid and longer service qualities which during the past few seasons placed Pennsylvania Tires where they are—highest in the regard of all motorcyclists who know the difference.

Keep on pointing out that difference. Push along the unbeatable "oilproof" feature. Get your due share of sales. "Oilproof" is a magic word. Emphasize it for Sales—Profits!

PENNSYLVANIA RUBBER COMPANY

(Reorganized February 1, 1910)

JEANNETTE, PA.

BRANCHES

Pittsburgh, 505 Liberty Ave.
Detroit, 254 Jefferson Ave.
Chicago, 1004 Michigan Ave.

Minneapolis, 34 S. 8th St.
Kansas City, Mo., 514 East 15th St.
Cleveland, O., 1837 Euclid Ave.
Seattle, Wash., Armour Bldg.

PENNSYLVANIA RUBBER CO. OF NEW YORK
New York City, 1700 Broadway Boston, Mass., 149 Berkeley St.

PENNSYLVANIA RUBBER CO. OF CALIFORNIA
Los Angeles, 930 S. Main St. San Francisco, 512-514 Mission St.

An Independent Company with An Independent Selling Policy.



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Pope

MODEL H, \$165

"BIG 4" - \$200

"TWIN" - \$250

Pope Line a Winner—Every Model a Wonder

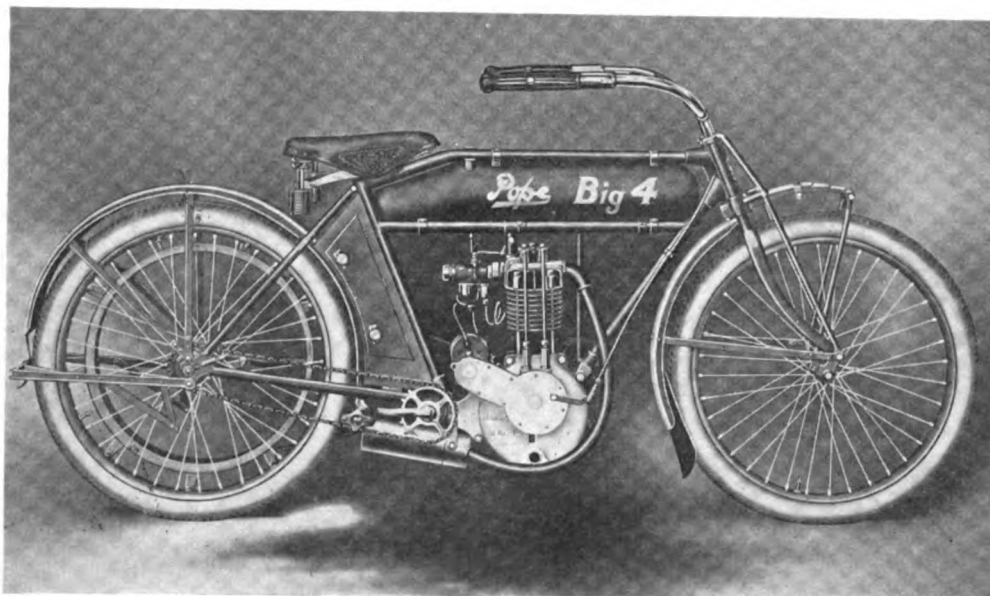
In the Pope line there are three distinct models. Model H, the popular lightweight; Model K, the Pope "Big 4"; and Model L, the Pope "Twin". Each motorcycle is a sure winner in its particular field. Prices are right. Magnetos standard equipment on all models.

MODEL H is a light, high-grade practical machine—reliable, efficient, and reasonably fast. Sells at a popular price and is in great demand.

MODEL K is a powerful, speedy "single" with many important and exclusive features. It has a combination clutch and idler operated by one lever, offset cylinder, eliminating dead center, and **overhead valves**, giving it an abundance of power for speed and hill-climbing. The new Twin which will be ready early in 1913 completes the Pope line.

We have the Product, the Plant, the Organization, the Experience, the Resources, and the Reputation to co-operate with our dealers to the very fullest extent.

Write Today for Dealer's Terms.



MODEL K, POPE "BIG 4"

The Pope Manufacturing Co., Hartford, Conn.

PACIFIC COAST DISTRIBUTORS

F. P. KEENAN CO.
Portland, Ore. NORTHWEST

KIMBALL-UPSON CO.
Sacramento NORTHERN CALIFORNIA AND NEVADA

C. L. SMITH, Los Angeles SOUTHERN CALIFORNIA

When writing to advertisers, please mention *MOTORCYCLE ILLUSTRATED*.

Extract from "1913" INDIAN Announcement

"All 1913 Indians are equipped with $2\frac{3}{4}$ -inch tires as against the $2\frac{1}{2}$ -inch tires of 1912. The widening of the forks, both front and rear, also allow for the use of anti-skid chains in addition to the larger tires."

Other manufacturers are doing likewise because Weed Chains are recognized as the only device to absolutely prevent skidding. They afford perfect traction in sand, mud or on wet slippery pavements and roads.

This is what Veteran Automobile Drivers and Seasoned Motorcycle Riders say about Anti-Skid Chains.

Mr. Geo. H. Robertson says—

"I believe that everybody who drives a car has at one time or another had some experience with 'skidding.' The driver of a machine has all kinds of conditions to deal with. Some are more dangerous than others; but the everlasting, ever-present danger is skidding.

"All kinds of devices have been invented, and most of them have gone the way that most novelties do, because novelties as a rule do not serve a practical purpose, but inventive genius was persistent and the non-skid chain was finally evolved and it alone has done more to raise the safety and hence the pleasure of driving, than anything else. I believe I might safely say that I have tried everything, but I have never been satisfied by anything else as I have been with chains."

Photo of Mrs. Gale alone, with motorcycle before Mr. and Mrs. Gale's ascent of Pike's Peak

Mr. and Mrs. Gale, that intrepid pair who have just completed their transcontinental trip, during which tour they ran the gamut of roads absolutely indescribable in their wretched condition, cheerfully admit that were it not for Weed Chains, disaster would have overtaken them many a time.



Gale says: "'Pike's Peak or Bust,' without Weed Chains on these roads it would have been bust for ours." And Gale ought to know for he has probably more difficult tours over awful roads to his credit than any rider in this country.

Weed Anti-Skid Chains

With the "Creeping Grip"

Give perfect traction, prevent sliding and slipping. Make motorcycling absolutely safe—sixty miles an hour with perfect safety—make all roads good roads.

The continuous "creeping" prevents injury to the tires and keeps them clean, minimizing the chances of punctures.

The secret process of hardening the cross chains, just adopted, gives extreme lasting qualities.

Light and easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

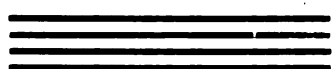
*Order from your dealer or
write for full particulars*

Weed Chain Tire Grip Co.
28 Moore Street
NEW YORK

*Motorcycle Manufacturers
Have Provided for*

COMFORT AND

¶ The dealer of to-day has to cater to prospects of every character his prospective buyers. Any features of his machine that will represent a percentage of sales. There is no question that a motorcycle superior in power and speed has a decided advantage with a buyer. It is a requirement in the highest degree is the most satisfactory both for the following comparative facts before deciding on the transmission.



Comfort

¶ Smooth operation is a feature of motorcycle riding that paves the way to physical comfort. The transmission often makes the difference between this desirable feature of riding and the reverse—progress by a series of unpleasant jolts and shocks. This is particularly the case when riding conditions call for a change in the rate of speed. The rider of a belt driven machine, in contrast to machines with other transmission, experiences no discomfort from any irregularities of motor operation; for example, should he accelerate his motor or suddenly close the throttle, the flexible belt will take care of the resulting change of speed and no shocks will be felt. If the rider should let in his clutch or speed up his motor too abruptly, or if from any other cause the load thrown on the power-plant should be too great, a slight slipping of the belt would prevent any jerks.

¶ If difficult hills cannot be negotiated by a single steady surge from base to top, the flexibility of the belt will permit of the machine being driven up by a series of spurts. With a more rigid type of transmission, spurting can only be done at the expense of extra wear on the clutch surfaces and excessive strain to the frame.

¶ Should the motor stop suddenly, the belt will slip, usually sufficiently to enable the rider to keep his saddle. A more rigid and consequently harsher form of drive may be the cause of a serious and expensive accident to either the mount or rider, as the clutch is the only means of relieving the tension.

The Graton & Knight Manufa

MANUFACTURERS

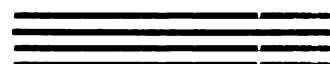
SPARTAN

EFFICIENT, ECONOMICAL, CLEAN AND COMFORTABLE,—THE TRANSM

CLEANLINESS

ter, and overcome all sorts of objections in making customers of
sult in a higher degree of satisfaction to the buyer mean a greater
rior in comfort and cleanliness to another of the same relative horse-
obvious that a machine with a transmission possessing these two
r the rider to buy and the dealer to sell. Read well, then, the
ou are to advocate.

Cleanliness



¶ Belts require less frequent lubrication than chains. Although both forms of transmission should receive proper care and attention, a belt can be more or less neglected in the matter of lubrication, while an equivalent amount of neglect to a chain would result in excessive wear and a quick ultimate ruin.

¶ While the belt lubricant is usually in the form of a jelly-like dressing put up in convenient flexible tubes, and can be applied without any appreciable soiling of the hands, the chain requires a thorough cleansing, then a soaking in a thin lubricant or oil—a very grimy process at best. While the belt dressing adheres to the belt surfaces and does not fly about, the chain lubricant spatters disagreeably when the transmission is in motion, soiling both the rider and machine unless guards are used.

¶ Lubricating the chain is not only a dirty operation, but it requires the removal of the chain from the sprockets. No removal of the belt from the pulleys is required when applying its dressing.

¶ Those who like comfort, together with cleanliness, can, therefore, readily appreciate the advantages of the belt form of transmission.

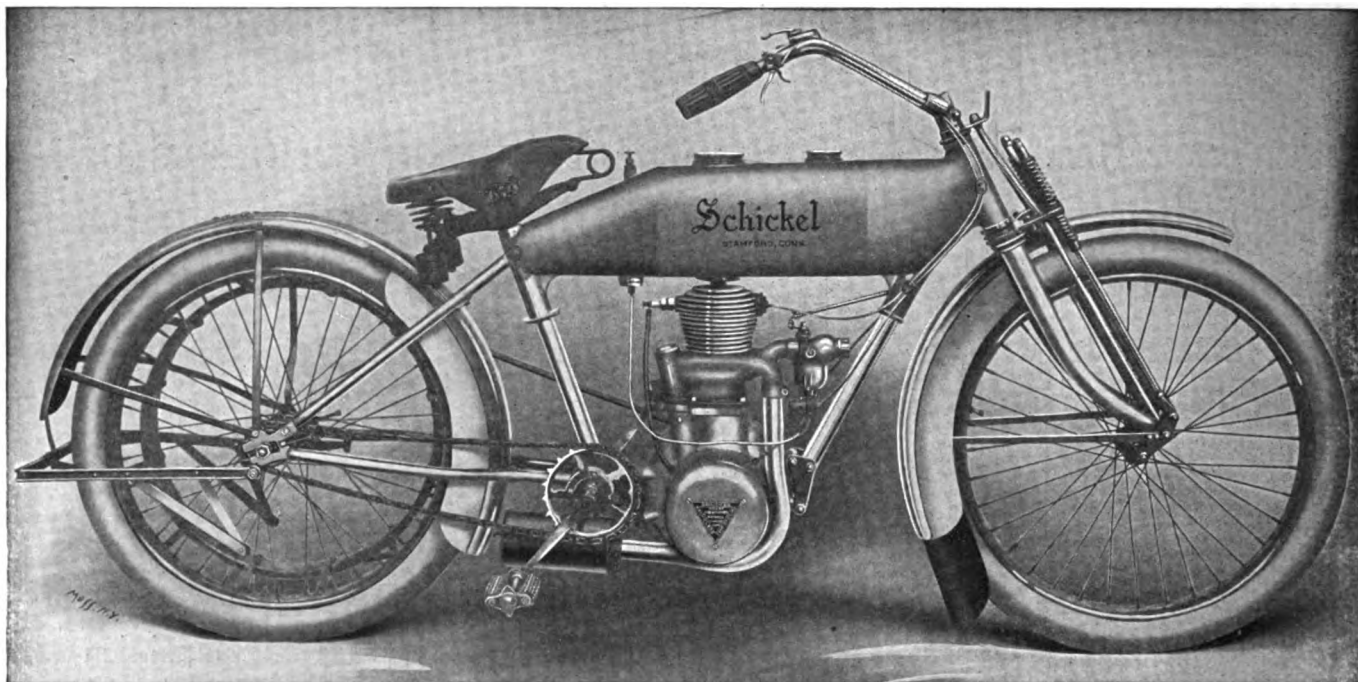
cturing Co., Worcester, Mass.

OF THE FAMOUS

BELTS

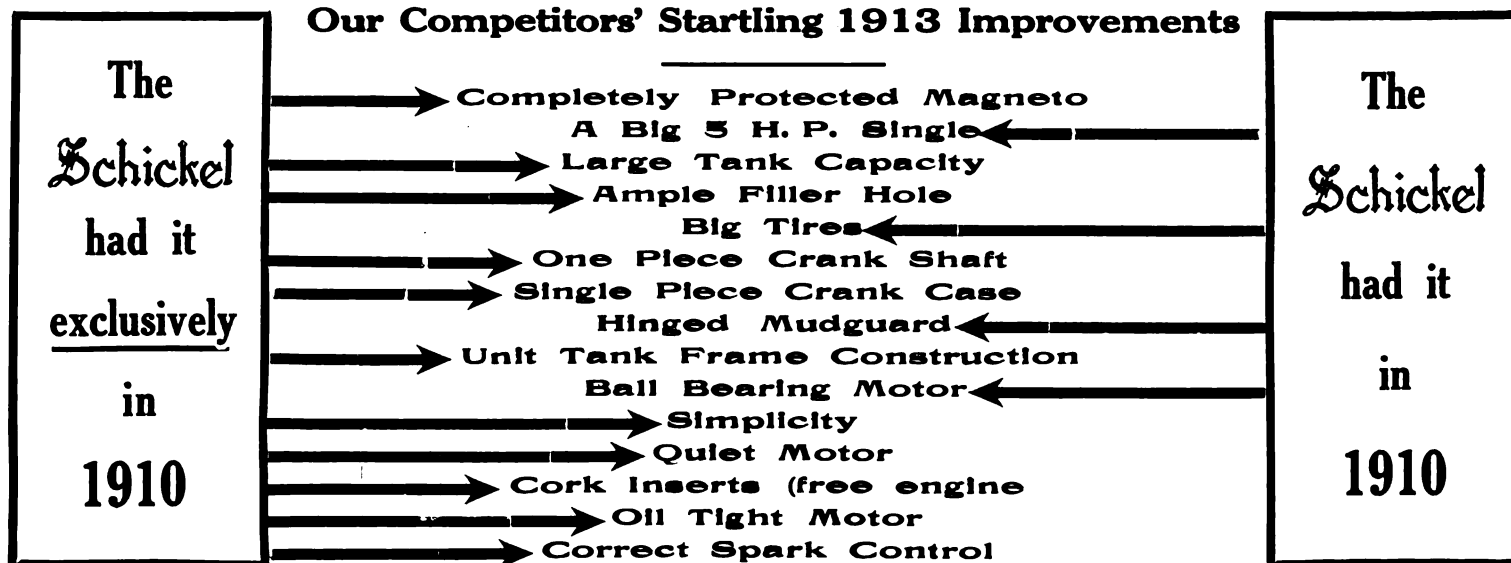
MISSION FOUND ON OVER 80 PER CENT. OF BELT DRIVE MACHINES.

How the 1910 Schickel Set the Pace for 1910 -- 1911 -- 1912 and 1913



Compare the Schickel of three years ago with the very latest 1913 announcements.

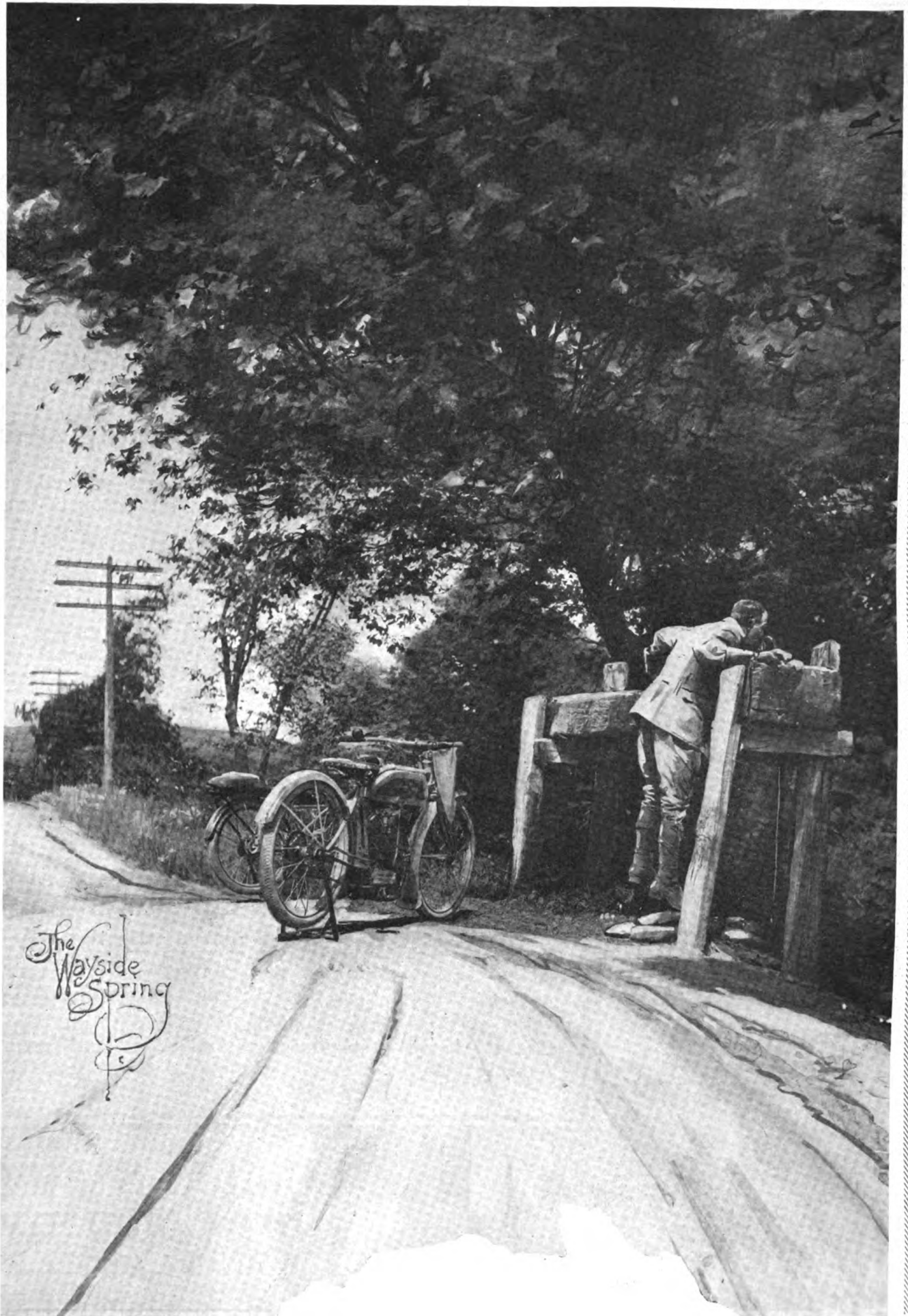
Our Competitors' Startling 1913 Improvements



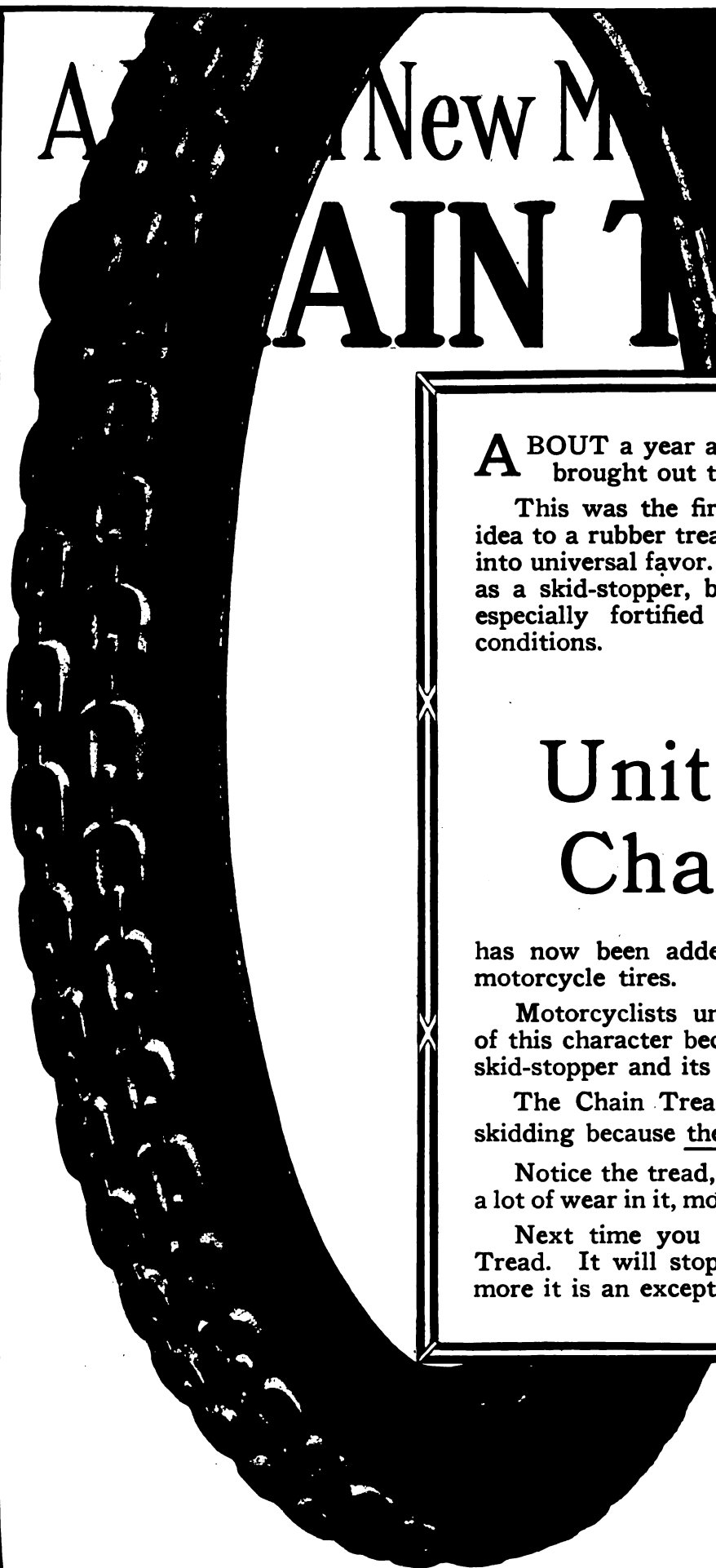
There is just one reason why Schickel Dealers gladly renew contracts before our 1913 Announcement is out—Schickel exclusiveness is years in advance of 1913 improvements.

Dealers, write to-day for literature and proposition

The Schickel Motor Company 59 Garden Street, Stamford, Conn.



The
Wayside
Spring



A New Motorcycle Tire CHAIN TREAD

ABOUT a year ago the United States Tire Company brought out the Chain Tread Automobile Tire.

This was the first practical adaptation of the chain idea to a rubber tread, and the tire bounded immediately into universal favor. Motorists found it not only effective as a skid-stopper, but particularly rugged as well, and especially fortified for use under all sorts of road conditions.

The United States Chain Tread

has now been added to our already complete line of motorcycle tires.

Motorcyclists unquestionably will appreciate a tire of this character because of its proven effectiveness as a skid-stopper and its remarkable service qualities.

The Chain Tread gives constant protection against skidding because the chain is built into the tire.

Notice the tread, how thick and heavy it is. There is a lot of wear in it, more than you get from an ordinary tire.

Next time you are buying tires specify the Chain Tread. It will stop your slips and slides, and furthermore it is an exceptionally economical tire to use.

**United States
Tire Company
New York**

F. A. M. DIRECTORS AT ST. LOUIS

In Long Session Board Makes Salary Adjustments, Reduces Track Franchise Fees, Defines Foreign Racing Policy, Plans English Alliance, Airs Controversies and Receives Denver Application for 1913 Assembly.

ST. LOUIS, November 9.—Seven members of the Board of Directors of the F. A. M. underwent the monotony of train journeys of from ten to thirty hours each to be present at a special meeting here today. Two directors held proxies, so that for the first time in the history of the organization the entire membership of the Board was represented. Incidentally, the directors, who were in session with only one short recess, continuously from ten o'clock in the morning until after midnight, transacted an unprecedented amount of important business and cleared up several apparently hopeless situations.

Features of Busy Session.

The session was featured by the election of Secretary-Treasurer Gibson as secretary ex-officio of the Board of Directors; the determination of the salaries of the chairmen of the Competition and Membership Committees, respectively; an agreement among the directors upon means to facilitate the transaction of business through the mails; reference of the relay race scheme to Chairman Willis, of the Press Committee, and Guernsey Van Riper; the reduction of both board and dirt track sanction fees; hearings to Jack Prince, M. F. Bramley, L. J. Sullivan (anent Thornley), and several of the St. Louis boys in reference to the charges against Referee Hellman, which were not sustained by the Board; a thorough airing of the Dallas mix-up; amendment of the form of the board track franchise agreement, and a decision to have a sliding scale of annual fees on long term contracts; the refusal of the Board to re-open the Kraemer case; the making up of the 1912-1913 budget; the endorsement of Prince as a track builder, etc.

President Patterson was in the chair and Director Sauer acted as secretary *pro tem*. Present were also Directors Willis, Hamilton, Thornley, French and Johnson. Willis held Estabrook's proxy and Thornley that of Collins.

Constant Reinstated.

For competing at two Canadian meets as a trade rider last month on a track where the public was charged admission, J. V. Constant, of Brooklyn, had been declared a professional. Constant submitted a dignified appeal to the Board, and showed that he understood the Canadian F. A. M. agreement to mean that an F. A. M. rider was well within his rights in competing under Canadian rules. Constant did not question the right of the Chairman of the Competition Committee to professionalize him. As there was reasonable room for a misunderstanding of the terms of the alliance with Canada the directors, acting as the Competition Committee at large, restored the amateur status of the Brooklynite.

Foreign Policy of the F. A. M.

At the same time the policy of the organization in the premises was defined. Under the agreement, Canadian riders competing in this country will be considered as amateurs if they

are such under Canadian rules, and vice versa. That does not signify, however, that an American rider can compete in Canada under rules which seriously conflict with those of the F. A. M. However, it is the plan of the Canadian Motorcyclists' Association to have its competition rules substantially conform with those of the F. A. M., and Mr. Sauer was instructed to request the C. M. A. to have the matter in shape by the first of January, so that there can be no further confusion.

Thornley's Salary.

By a unanimous vote, upon motion by Mr. Hamilton, the Board voted to the chairman of the Membership Committee a salary of \$1,040 a year, in addition to expenses for printing and postage.

The much-mooted Thornley salary and expense allowance question was settled after some discussion, as follows: Salary, \$25 a week, contingent upon the amount being taken from sanction fees; allowance for stenographic service, not more than \$20 a week; for rent, heat, light, etc., of the offices of the Chairman, \$15 a week.

Sullivan vs. Thornley.

T. J. Sullivan, sent to St. Louis by a Chicago journal to prevail upon the Board to substantially endorse its attitude towards Chairman Thornley, was given a hearing. No charges having been preferred by Mr. Sullivan, the directors were at first disposed to dismiss the entire matter on the ground that there was nothing to consider. In the end, however, a resolution was adopted in which the F. A. M. directorate expressed its disapproval of the personalities engaged in on both sides, and also declared that Thornley had exceeded his authority in arraigning the motorcycle trade in the much-talked-of Mann letter, the sentiments of which communication were contrary to the views of the directors of the F. A. M.

English Alliance.

Chairman Sauer, of the Legal Action Committee, was directed to arrange a working alliance with the English A. C. U., through Mr. Wells, of London, who was recently delegated by President Patterson to represent the F. A. M. in Great Britain. Mr. Sauer was also instructed to make any arrangements that might be practicable for the co-operation of the F. A. M. Touring Bureau with the American Automobile Association with a view to obtaining for F. A. M. members the privilege of purchasing road maps at special discount rates.

Chairman Thornley was instructed to turn over to the national treasurer the first of each month all funds in excess of a working bank balance of \$500.

A hearing was given on the charges brought against Referee Hellman, of the St. Louis Motordrome. The Board concluded that there was not enough evidence before it to sustain the charges.

(Continued on next page.)

Denver Wants 1913 Assembly.

Through President Patterson, Denver made application for the 1913 F. A. M. meet. No action was taken as, under the Constitution, the matter of selecting a convention city cannot come before the Board

more than 90 days in advance of the date of the annual meet. That Denver will be a strong contender is certain.

The Board laid on the table, to be considered at its next meet, a proposal to send the Chairman of the Competition Com-

mittee to the Pacific Coast. It is probable, however, that some such action will be taken in the near future with a view to permitting the directors to work in complete harmony with Federation leaders in the Far West.

BRAMLEY FAVORS SAUCER CIRCUITS

Well-Known Promoter Outlines Plans Before F. A. M. Directors and Refutes Outlaw Rumors—Clean Bill of Health for Prince; Kraemer Denied Another Hearing by Board—The New Franchise and Sanction Fee Schedule.

ST. LOUIS, November 9.—Board tracks were very much in the limelight at the long session of the Board of Directors of the F. A. M. here today. Messrs. Bramley, Prince and Johnson, the latter a director; the managers of the St. Louis Motordrome, and the ubiquitous Kraemer, were on hand, and all but the latter appeared before the Board. President Patterson sustained the point that the case of Kraemer, who has just been expelled from the organization, could be reopened only by the National Assembly, and that Kraemer, who was very anxious to be heard, would have to wait until next summer.

Prince's Clean Bill of Health.

Jack Prince came before the Board to learn why the impression had gotten abroad that he was persona not grata with the F. A. M. The members of the Board, including Thornley, frankly admitted that they could not understand why such a feeling existed, except that it might be attributed to Prince's having been associated with an expelled member. Not only did the Board make Prince appreciate that its members considered him a crackerjack track builder and an all-around good fellow, but also dismissed the veteran with the assurance that he should have a letter from President Patterson in which the views of the directors would be reduced to writing, so that there could be no further question as to Prince's good standing in the F. A. M.

Bramley to the Front.

W. F. Bramley, who is rapidly becoming a sort of board track king, addressed the directors on a number of subjects having reference to the operation and management of board tracks. Bramley has obtained restrictive agreements for tracks in Kansas City, Detroit, Cincinnati and New Orleans,

and he has applications pending for Indianapolis, Buffalo, Louisville, St. Louis and Cleveland, tracks being already in operation in the latter two cities. Jack Prince had been considering a circuit including Houston, San Antonio and New Orleans, and Bramley offered to waive his rights in New Orleans if Prince needed that city to round out his plans.

Circuits Give Best Results.

Bramley believes that an isolated board track is not, generally speaking, a good proposition. There should be a series, or circuit, he said, to make board track racing permanently interesting to the public, and profitable to the promoters. He emphatically disclaimed even the slightest intention of building up an organization outside of the F. A. M. It had been demonstrated to him that there could be found not a single good reason why a board track owner should even consider an outlaw movement. The F. A. M., he declared, was the board track owner's best friend, not only from a sentimental point of view, but also in every way as a business proposition.

Fees Considered Too High.

It was true, Mr. Bramley declared, that the board track interests believed that the franchise and sanction fees were rather high. As a matter of fact, the directors had come to St. Louis, among other things, to make moderate reductions in these charges and, before the Board adjourned, it was decided to have a sliding scale of fees for restrictive agreements entered into for three and five year terms, as follows: First year, the principal amount; second year, ninety per cent. of the first; third year, 80 per cent. of the second; fourth year, 90 per cent. of the third; fifth year, 90 per cent. of the fourth, and for each year after that, 50 per cent. of the first year's

fee. These reductions apply only to three and five year agreements, and renewals thereof.

New Franchise and Sanction Fees.

The new board track sanction fees are as follows: If only one meet a week is held, \$25, \$10 of which is returned by the chairman to the referee; two meets a week, \$20 a day, \$5 of which goes to the referee; three or more meets a week, \$15 a day, \$5 of which is to be paid to the referee. Dirt track sanctions will hereafter be \$10, instead of \$15, but the chairman will not send out any track paraphernalia. Of the \$10 paid for dirt track sanctions, half is retained by the organization, and \$5 is to be sent by the chairman to the referee when the former receives his report.

Dallas Track Checks Protested.

Chairman Thornley reported that two checks, tendered in payment for a restrictive agreement and for sanctions by the Dallas track management, had been protested. It was ordered that if the checks are not honored and a complete settlement made within 30 days, the franchise be revoked.

Amendments.

The board track resolutions were amended as follows:

First, to provide that promoters of board tracks shall begin work not more than sixty days after the agreement has been made, and that within four months after the agreement has been entered into the track shall be completed and in operation.

Second, that applications for restrictive agreements shall be placed directly before the Board of Directors by the chairman of the Competition Committee. The change was made simply to facilitate the transaction of business.

TO LEARN THE GRADIENT.

STATEMENTS to the effect that hill-climbing is likely to receive more attention from clubs and riders in general during the coming season than for years past lend pertinence to a description of a home-made gradometer which recently came to notice. This device provides a simple means of ascertaining the grade of a hill, and would no doubt prove a valuable addition to the equipment of any clubhouse, even though the organization did not go in for hill-climbing on a competitive basis.

The gradometer is made up of a metal tube about $\frac{7}{8}$ of an inch in diameter, or even a short piece of wooden pole, in which

a small spirit level is set. An upright scale is fashioned in such a way that a clamp—tightened by a thumb-screw—may slide up and down on it, and this clamp is also secured to one end of the tube or wooden piece in which the level is set. The clamp is so arranged that it is, for example, $3\frac{7}{16}$ inches high, from its bottom line to the center line of the tube in which it is attached. On the other end of the tube is a simple bracket, also $3\frac{7}{16}$ inches from its point to the center line of the tube. The point of this bracket is set on the "up" side of the hill and the upright scale before referred to supports the tube on the "down" side. The clamp is then moved on the scale until the level shows that the tube

is horizontal, and the distance from the bottom line of the clamp to the hill surface is then read on the scale. Multiplying the scale reading by 20 will give the per cent. of the grade, if in feet; if in inches it should be multiplied by 1.666. For all ordinary grades the scale should be about 24 inches long and should be graduated for 23 inches.

TWO YEARS OF PROGRESS.

ELWOOD, IND., has a lively squad of Excelsior riders who make regular trips to points of interest throughout the district. They report that two years ago there was not a motorcycle in the town, while today the single trackers are to be seen on all sides.



IVERS reasons may be advanced for giving a motorcycle and its equipment most careful treatment during long tours of our own country, and if this is the case let us consider how much more important it is for an American tourist in Europe to be fortified against emergencies. Take the tire question, for example. Motorcycle tires, in

the abstract, appear to be such ordinary objects—merely rubber covers, with tubes for the harboring of a little air—that even the rider of considerable experience is inclined to underestimate their importance until he is brought face to face with such a problem as confronted us on our recent European tour. I needed tires and could not obtain them to fit my rims, so that instead of being the prosaic rubber casings referred to in the opening of this paragraph they became the most desirable articles imaginable. According to the chaps who keep tab on things historical, King Richard, of England, once offered his kingdom for a horse; what do you think he would have offered for a pair of good motorcycle tires if he were stranded several thousand miles from home with a twin seven?

That was just my predicament, and at the time that it confronted me we were not far from the place at which King Richard made his remark anent the horse. We were in southern France, six miles south of Chambery, to be exact, and 381 miles south of Paris. Both my American tires, which had given excellent service up to that time, went out of commission at about the same point, so that I was called upon to make repairs, push my machine six miles or ride with a flat rear tire. I fixed the front tire temporarily, and rode into the town with the rear casing flat.

Facing a Serious Problem.

Laying aside all jocularities, I really was in a serious position. Upon my arrival in Chambery I learned that one of the Michelin tire factories was located at Lyons, just a few hours by train from Chambery. As the company had no call for tires to fit American rims I was told that I would probably be unable to

procure any, but I was advised to try the factory as a last resort. I did and was informed that no tires were on hand to fit my rims. Then I began a patching campaign, and we proceeded on our way; but I never knew when I was due for another blow-out and a long walk. It was a very unsatisfactory method of travel, to say the least.

I consoled myself with the thought that in the "wonderful city of Paris" everything for a motorcycle would be obtainable, and we rode on as cheerfully as possible. In Paris, however, I found the most peculiar business methods I have ever encountered. All the tire firms, including the very large branches of the different factories, were closed from one and a half to two hours at lunch time, and of course we arrived so that a wait of over an hour was necessary. We were a bit peeved, but as there was no way out of the situation we waited.

Finally the tire branches were reopened and I applied for 28 by 2½ inch casings. At first

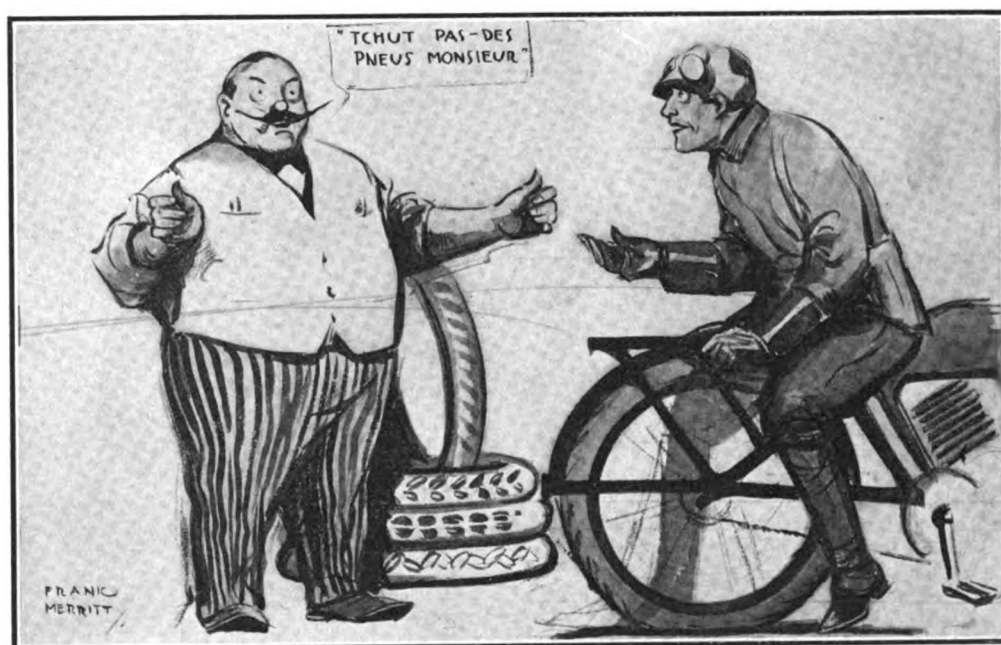
days to wait for a pair of tires! There was nothing doing, so we gave up in disgust.

Some time later the Michelin branch located some tires which had metric measurements conforming to the size the tire people said I needed, but when I attempted to fit them to my rims I found they were fully an inch and a half too small. In desperation I took my rims out to the Michelin factory, where I was told that they were an odd size, built for a 2¼ bead, and that they could not be fitted without considerable delay. We decided about this time that our only course was to ship my machine to London, where several American tire firms have agencies, and much as we regretted this procedure we were forced to take advantage of it.

London Tires Fill the Bill.

Once in London, the rider will find that there are five firms manufacturing 28 by 2½ inch tires suitable for our standard rims. There are the Kempshall and Palmer tires, among the higher class goods, and the Continental, Peter Union and Hutchinson tires at somewhat lower prices. The prices of the three latter makes are about the same as those charged for standard American casings, and the first two run considerably higher—though they are said to be worth the difference. As we did not intend to make a protracted tour in England we bought the ordinary tires, Peter Union, and it was well that we did not attempt to do very much riding on them.

I have written this article with a view of impressing upon the American tourist the importance of carrying his own tires, or of making special arrangements with some American manufacturer to supply tires of the proper sizes. The larger American companies have branches in Paris, but as they do not have a call for tires except those designed for European rims they will probably be unable to meet the American tourist's demand unless notice



"The French Manager Said He Had No Suitable Tires."

I was informed that they were in stock and I was jubilant, but a search of the stockroom failed to unearth any casings of the size specified. The manager of the establishment offered to order the tires for me and have them in ten days, but imagine staying over ten

is given in advance. On my next European tour I intend to carry two casings and two tubes. It may be claimed that I cannot transport them on an ordinary motorcycle, but if a chap really wants to carry them in this way he can, and I am going to prove it.

Big

YALE "5"

FEATURED FOR 1913

New single of exceptional sturdiness replaces former 4 h. type; long-stroke motor, mechanical inlet valve, belt or chain transmission—Improvements in twin seven also—Distinctive tank construction in both models for coming season.

FOR 1913 the Yale line will be confined to two models, all the attention of the designers and factory force being centered on these types. There is a 5-horsepower single-cylinder model, at \$225, and a 7-horsepower twin, at \$275, both showing power on actual test far in excess of their rating.

The 5-h. single is, of course, an entirely new model, taking the place of the old 4-h. single. It has a big, long-stroke motor with a me-

mensions to do its work properly, and all reciprocating parts are so balanced as to move with no vibration. The weight of pistons, connecting-rods and pins is balanced with such extreme accuracy by counter-weights on the fly-wheel that the piston reaches the end of its stroke without the slightest shock, and the motor runs as smoothly as an electric engine.

The gas passages are so designed as to give the gas access with minimum resistance, so

to give efficient running at high speed, the motor would fail to hit regularly when throttled down; and conversely, if it were adjusted to run smoothly on low speed, the motor would choke from too rich a mixture when the throttle was open. The Yale intake pipe is three-quarter inches in diameter, in perfect proportion to its bore and stroke.

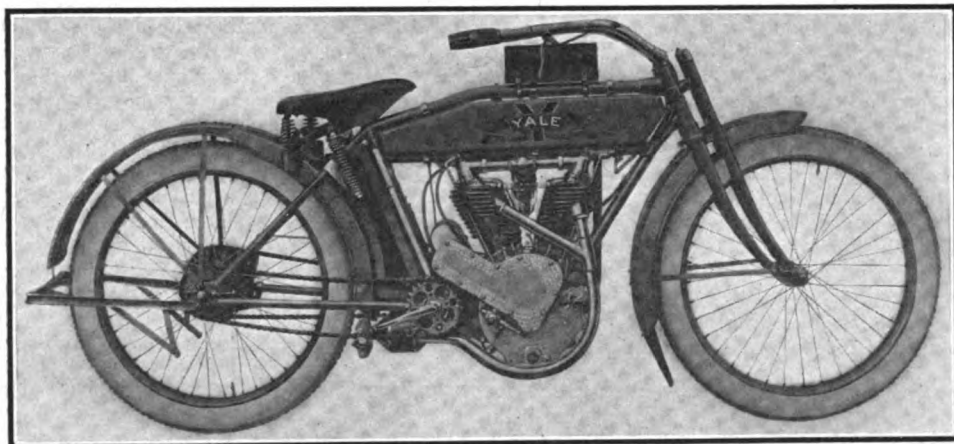
The Power Developed.

The twin motor has shown exceptional power on block tests. With a testing machine that had been carefully inspected for accuracy, several of these new twin motors were tried out, and the average power recorded was 9.2 h.; a few ran well above this, but none showed below 9 h. While these tests were being made the single motor was run for some time at 4,600 revolutions per minute, while the twin showed 4,200 r. p. m. As very few ported special racing motors show a higher rate of revolution than this, it is considered rather remarkable speed. Only the perfect balance and absence of vibration make this possible.

Lubrication System.

The motor will be oiled by a new mechanical oil pump of the plunger type, driven by a worm gear. This keeps a constant supply of oil in the motor, feeding it in proportion to the speed at which the engine is run. The pump can be adjusted to deliver more or less oil, as desired. A hand oil pump is provided for use in emergencies or for racing. An oil glass in the motor base allows the amount of oil to be observed at any time at a glance.

The gas is mixed by a Heitger carbureter of an improved type, that has been adapted to meet the special needs of Yale motors. The spark is furnished by a Bosch magneto of the armored, or enclosed, type set behind the



Valve Side of Yale 7-h. Twin for 1913.

chanical inlet valve, and on the block at the factory it has averaged close to 6 h. The transmission on this model may be either flat belt or chain, with the Eclipse free-engine clutch as regular equipment on all machines. The flat-belt machines have regulation of belt tension and clutch engagement separate, so that they can be adjusted independently.

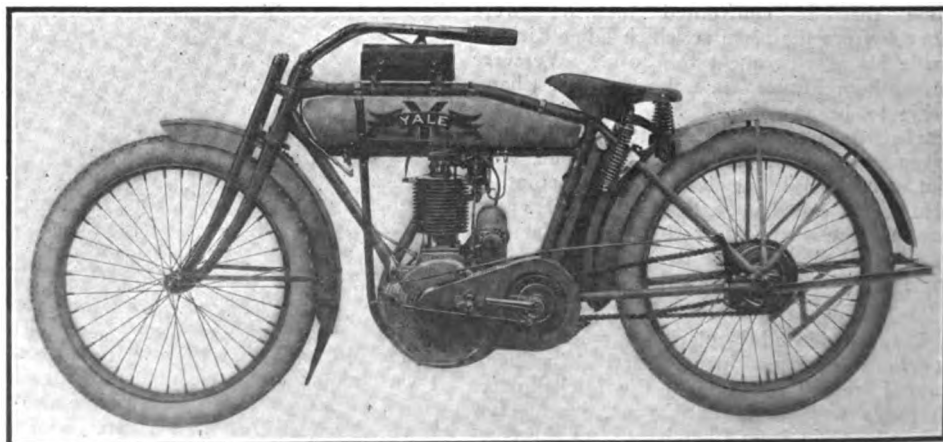
More power at all speeds, and especially in running slowly, is a big advantage of the new 5 h. single. As a result, hills that are very difficult for 4-h. machines are easy for the new Yale 5; when riding in sand or mud, where it is necessary to go slowly but where much power is necessary, the power superiority of the new 5 stands out strongly. The transmission on the twin model may be either V belt or chain.

The Big Twin Seven.

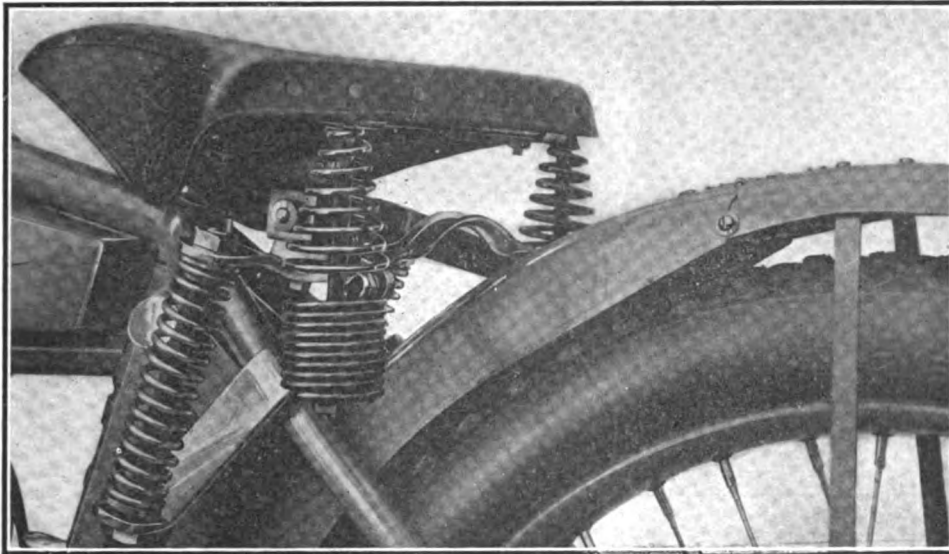
The motor of the 7-h. model is a remarkable power plant. The cooling flanges are of the pattern that distinguished the 1912 Yale twins, allowing perfect circulation of air over the surfaces of both cylinders and insuring satisfactory cooling of both.

Another thing that has a great deal to do with the high efficiency of the Yale twin is the perfect proportion of all motor parts. Each is designed and made of just the correct di-

that the fresh charge goes in and the burnt charge goes out of the cylinder quickly. It was found by a good deal of experimenting that too large an intake pipe, by reducing the suction caused by the down-stroke of the piston, would fail to cause a large enough jet to be drawn from the spray nozzle of the carbureter to give a correct explosive mixture; consequently, if the carbureter were adjusted



Transmission Side of the New Yale 5 h. Single.



Detail View of Y-A Shock-Absorber and New Hinged Mudguard.

cylinder where it is well protected. The gears of the magneto train are of nickel steel with a face $\frac{3}{8}$ of an inch wide. These gears are of the helical type, which is found to be more quiet than any other, besides giving better contact.

Distinctive Frame Lines.

The frame lines of the new Yales are distinctive and give a much more racy appearance to the machine. The top frame bar is dropped at the rear to give a very low saddle position, and the shape of the tank is changed. The machines will be finished in gray with blue striping, and there will be a blue panel on the sides of the oil tank. The oil tank is separate from the gasoline tank, now being built behind the seat mast tube. The tank capacities are enlarged so the rider can now carry three gallons of gasoline and a gallon of oil.

An important feature of the 1913 models is the tire equipment. The Yale for 1913 will be fitted with 3-inch tires, the same size that is used on automobiles that weigh a thousand pounds more than the motorcycle. This surplus of strength means longer tire life, less trouble on the road and easier riding, and is, of course, a big advantage to the rider who wants to use his machine for tandem or side-car work.

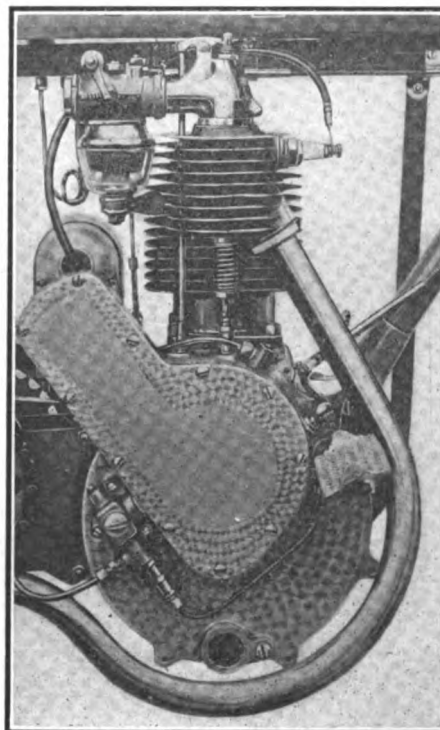
Plenty of clearance is allowed between tires, mudguards and fork sides, so that tire chains can be used for riding in snow or mud. Also there is no chance for mud to clog up the wheels. The rear mudguard is a new idea for American motorcycles, as it is hinged so it can be swung up out of the wheel for removing the rear wheel. This is of course an immense advantage in making tire repairs or doing other work on the back wheel, and will be appreciated by all riders. A choice is allowed of the Corbin band brake or the new Eclipse multiple-disc brake.

There is a new muffler on the Yale this year that makes it an unusually quiet machine, though producing no perceptible back pressure. The muffler is located back of the motor, exhaust pipes coming to it in a graceful sweep; a cutout placed just ahead of the muffler permits the gas to be given a straight-line exit when the rider so desires, although there is very little gained by doing this as far as power or speed is concerned.

The front fork of the Yale has given unusual satisfaction during 1912. It is an extremely dependable device, smoothing out all road jars in a pleasing manner and standing up under very severe use. Although the Yale has been in the most strenuous endurance contests of the season, and has been ridden in many hard cross-country trips, not one fork on any of the thousands of machines that the factory put out in 1912 has failed. The generous use of drop forgings for all connections, and the substantial construction of the fork, of course, have a great deal to do with this. Therefore, in view of the satisfaction that the fork is giving, no change has been needed in this feature.

Y-A Shock Absorber.

The rear wheel shocks are taken care of as before by the Y-A shock-absorber. This shock-absorber is built on the theory that if



Motor of the New Yale 5 h. Model, Replacing the 4 h. Type.

one spring, as in an ordinary spring seat-post, is good, two springs must be better; and two springs are used to take up the jolts for the Yale. By special construction all side-play is also eliminated, making the machine much easier to handle under difficult conditions.

Yale Publicity Campaign.

The Yale is going strongly to its big campaign of national advertising to put the motorcycle on a par with the automobile in public estimate. The result, of course, will be the creating of a big demand which the Yale dealer can turn into many sales, if he is alive to his opportunities. This big advertising campaign is being handled by one of the most expert men in that line in the United States, Theo. F. MacManus, advertising counsel for the Yale. MacManus' work has made the reputation of several big automobile companies and big industrial firms in other lines.

General Manager D. J. Welsh has found the results of the big national ads used so far more than satisfactory, and is backing up MacManus' efforts in every way. He has planned a factory output of 15,000 Yale motorcycles for 1913, and it is taken for granted that with the big sales and advertising campaign that is now being carried on the orders will run a good deal higher than the estimated output.

Sales Manager Robert Hinds arrived back in Toledo from an Eastern trip about a week ago, after having visited several of the prominent cities and closing up some 1913 contracts. Hinds returned quite pleased, as the outlook was in every way the most promising that he had ever noted; 1913 is sure to be a record year, says Hinds, and he believes the Yale will get its full share of attention.

A TIP FOR DEALERS.

JOE HOLLE, the "Bike Doctor," of San Francisco, transcontinentals this tip relative to the disposition of crates that are received on motorcycles: "Don't throw 'em away," says Joe, "by handling them judiciously you can turn them into quite effective road signs. You will usually find the name of the manufacturers in good-sized letters on several of the boards in each crate and by having a stencil prepared for his own name the dealer can make up his signboard. If the name of the manufacturers does not appear on the crate in large letters, the larger boards may be planed a bit and then painted so that a cheap and catchy sign is produced. We find that these signs serve very well for road advertising."

CAPTURED A HORSE THIEF.

EXPRESSIONS of gratitude are being heaped upon Jack Windon, a motorcyclist of Columbus, Ohio, who recently succeeded in running down Frank Miller, who had been making away with some of his neighbor's horses.

REGISTERED REPAIR SHOPS.

F. A. M. registered repair shops for week ending November 2 were as follows: Neff & Sees, Bird City, Kan., and Leroy Debolt, 208 South Meridian street, Puyallup, Wash.

V. H. WALTHER, of Belleville, Ill., recently rode from Pensacola, Fla., to his home on a motorcycle. He made the trip in thirteen days, covering about 1,000 miles.

NEW EXCELSIORS SHOW MORE POWER

Innovation is Offered in the 1913 Clutch Control and Changes in Timing and Valve Design Afford Greater Speed Without Increased Displacement—Improved Tanks and Other Retinements—Belt or Chain Drive on Both Models.

WITH its facilities increased to permit of a production of fully 25,000 machines for 1913, the Excelsior Motor, Manufacturing & Supply Co., Twenty-second and Union streets, Chicago, announces four models, a 7-10 h. twin and a 4-5 h. single, with a choice of either belt or chain transmission on both. The prices are as follows: Twin-cylinder model, fitted with either chain drive or Spartan belt, \$250; single-cylinder model, same transmission options as the twin, \$200.

The Excelsior 1913 twin motor has the same displacement as heretofore; that is, 61 cubic inches, and that of the single-cylinder motor is 30.50 cubic inches. The valves are mechanically operated on all models, the 1913 motor being fitted with an improved and materially strengthened intake valve cage and a new valve-operating cam, which permits of an earlier and a longer opening of the exhaust valve, thus providing for more complete scavenging of the burned gases.

How More Power Is Gained.

These changes in the timing and the valve design are responsible for a big increase in the power and speed of the motor. A dynamometer test showed that the twin developed 10 actual horsepower, despite the fact that the piston displacement has not been increased, so that 1913 Excelsiors will be eligible to compete in all regularly sanctioned F. A. M. meets.

A radical innovation is the 1913 clutch control, operated from the left grip. The throttle and valve lift are continued on the right grip, with the spark advance—which need seldom be changed—on the side of the tank. By this arrangement the rider has complete control of the whole machine without taking his hands from the handlebars.

The control, as heretofore, is made up of strong steel rods throughout, thus rendering it absolutely positive and sure. The design of the clutch and its control is such that it can be locked in or out by simply turning the handlebar grip over center in either direction. In addition to having a clutch, which is fitted to all models, a separate idler lever to regulate the belt tension is a feature of all the belt-driven Excelsior machines. The clutch is of the improved Eclipse multiple-disc type, which has been equipped with a new oiling system, a heavier cone and a more effective means of locking.

Bosch Ignition.

Ignition is by means of Bosch high-tension, enclosed, gear-driven magneto, the arrangement of the gear-drive being such that, if necessary, the motor can be disassembled without disturbing the timing except for one simple adjustment, which any novice would be capable of making. All 1913 models will be equipped with the new Schebler carbureter, which has been specially built for the Excelsior machine, and is guaranteed to provide greater economy, speed, power and flexibility than ever before.

Lubrication is by the automatic feed, gravity and splash system, the twin models being fitted with an auxiliary hand-pump inside the tank.

Improved Tanks.

Especially deserving of favorable comment are the 1913 tanks, constructed of heavy copper, with no seams except at the top, and reinforced with a U-shaped baffle plate and a heavy wall separating the gasoline and oil compartments. The laps at the joints are unusually long, and the entire tank construction is remarkably sturdy. The gasoline ca-

capacity is $2\frac{1}{2}$ gallons; oil, one gallon, on the twins; the single tanks are slightly smaller.

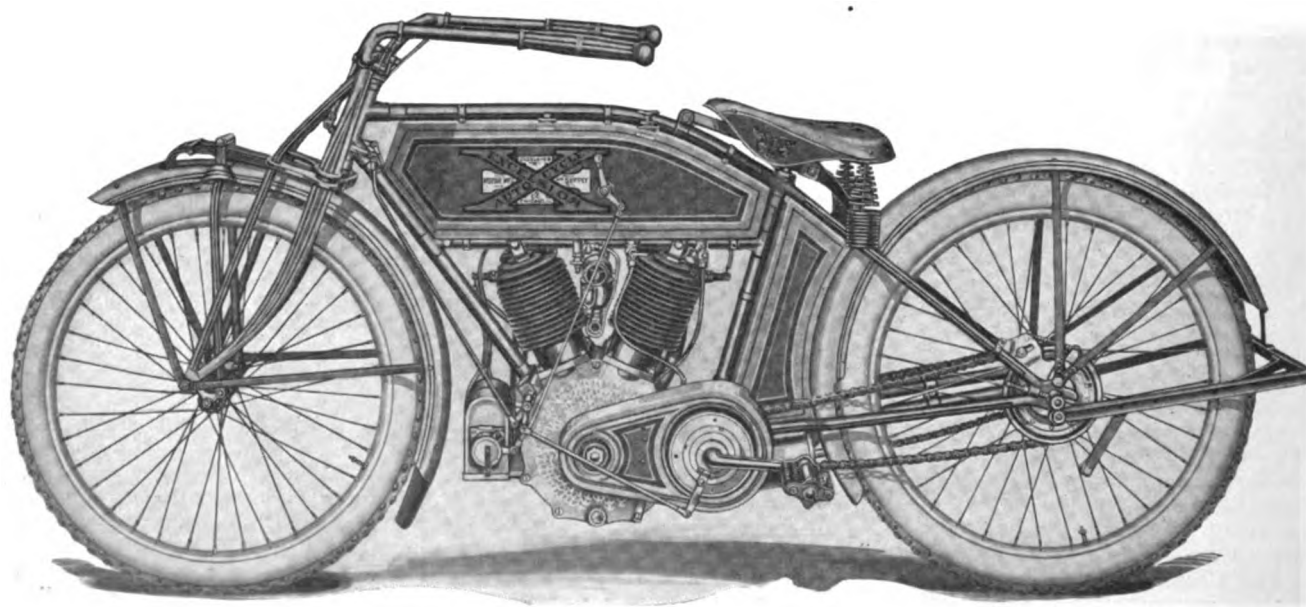
The well-known Excelsior adjustable, Kumfort Kusion seatpost, heavier and stronger than that of last year, is standard equipment; the spring, by reason of its being of a lighter gauge, is extremely resilient.

Other Refinements.

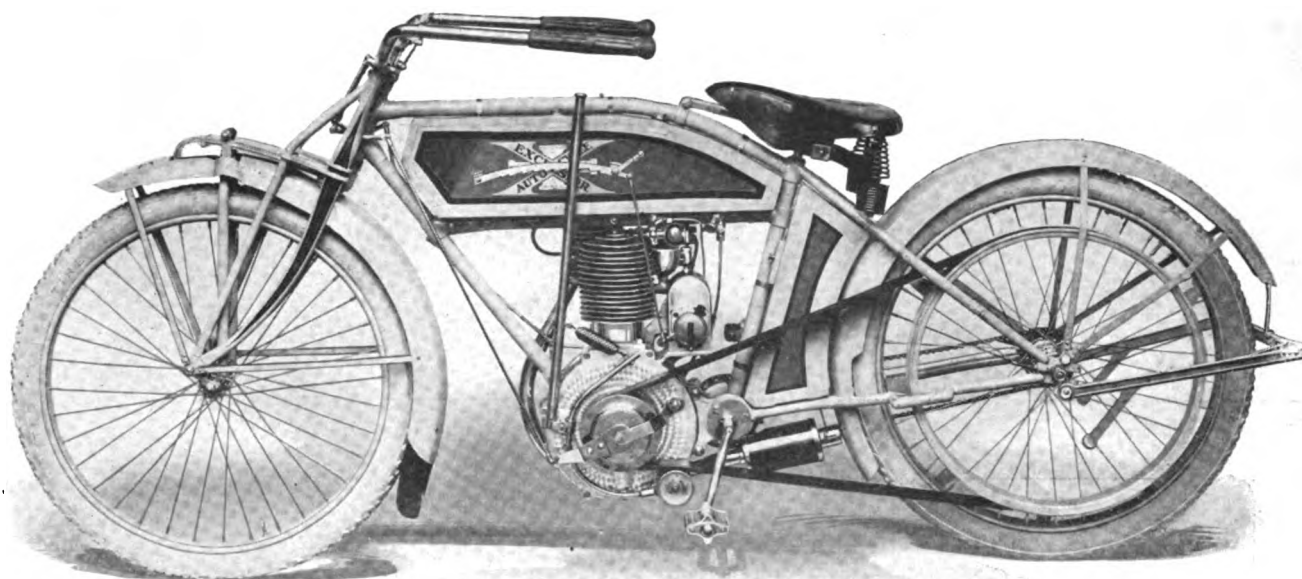
The forks are practically unchanged, except for a heavier spring and a safety loop. The fork tube is heavily reinforced, and the mudguards are held in place by double stays. Full shock-absorbing Troxel saddles are fitted. Tires are optional at the choice of the purchaser, either Goodyear, United States, Diamond or Continental studded tread; $2\frac{3}{4}$ -inch rear tires and $2\frac{1}{2}$ -inch front tires on the twins, and $2\frac{1}{2}$ -inch tires both front and rear on the single-cylinder models. A choice may be had of either Musselman or Corbin band brakes. The mudguards are wider and have a liberal clearance.

GRAVES FOUR-TIME WINNER.

LOS ANGELES, Cal.—Both Marty Graves and L. Fleckstein hit a winning streak on Sunday, November 3, at the Los Angeles Stadium. Graves was entered in four of the nine events and captured four firsts. He rode the machine used by Al Ward in previous meets. L. Fleckstein had three firsts and one second to his credit at the finish of the meet. Tommy Moon, the Australian rider, and W. G. Hamilton were to have ridden a match race, but the former had trouble with his English machine and the match was postponed. Hard luck stuck to Humiston throughout the meet. Twice he cracked his front cylinder, and in his third race he blew a tire, but managed to reach the paddock without a spill.



Excelsior 7-10 h. Twin, embodying new clutch control for 1913.



Excelsior 4-5 h. Single for 1913, also showing notable improvements.

EWELL'S THRILLING TRIP INTO MAINE

American Motor Company Official Gives His Machine Severe Test and Enjoys Fine Scenery in Pine-Tree State.

MAINE is the best State in New England for testing out a motorcycle's hill-climbing ability. Every road in the neighborhood of the Penobscot River affords a series of trying grades, closely resembling a scenic railway, the chief difference being that along the Penobscot you get real scenery instead of the imitation. When riding a powerful machine that will climb the almost vertical grades, the motorcyclist experiences a sensation which more level country can never produce. It is indescribable. When swooping down a long incline, and then shooting up the next steep grade, the feeling is something like that derived from riding on an express elevator, only more thrilling. Then when the next summit is reached, you guide the forward wheel between a few ragged rocks, which form the protruding top of a ledge, shut off all power and begin the next descent.

From this point, the next hill looks as if it were perpendicular. If a team or an auto happens to be going up at that instant, it looks as if you were in a balloon, gazing down upon it. In some cases you can actually see the floor of an open buggy.

Some Steep Grades.

One of the longest and steepest hills in the Pine Tree State is Hurd's Brook Hill, located in the town of Bucksport, on the road to Bangor. Even high-powered automobiles have to slip the clutch when taking it on low gear, and horse-drawn vehicles have to chalk the wheels and give the horse several rests on the way up. Another road has been built around this hill, as the grade caused so much trouble for all kinds of vehicles, but I didn't know this, and if I had, I would have tackled the hill just the same. I saw it in time to stop at the top of the preceding summit and inquire for particulars. Farmhands who were hoeing potatoes near the road said it was the

steepest in the State, and that they had never known a motorcycle to climb it.

I put in a fresh supply of oil and coasted down the descent before me. Then I opened the muffler and looked at the speedometer just as I reached the foot. The speed hand indicated 45 miles per hour. After passing through about fifty feet of loose sand which slowed me up a little, the long climb began. The throttle was opened up about two-thirds, and the clutch thrust in hard. The motor began to snort viciously with that sharp double crack peculiar to the M.-M. twin, only more savagely than usual, on account of the new 1913 pistons I was trying out on this trip.

I opened the throttle another twist when I reached the steepest grade, and the machine belched forth the blue exhaust through the

open muffler like a gatling gun, the explosions reverberating in the neighboring mountains. The machine shot ahead like a bullet. Reaching the top, I glanced at the speedometer again, and to my surprise it registered 39 miles per hour. That was enough to convince me that the new pistons and new inlet manifold on the 1913 M.-M. twin have increased the power. Another point: With the muffler closed, that motor just rippled along on the level with hardly a sound.

A Chat With Estabrook.

At Bangor I had the pleasure of meeting the genial Mr. Estabrook, of F. A. M. fame. It is no wonder that this fine organization has tripled its size in the last two years with such a conscientious and brainy worker behind the guns of the membership committee. Returning, I paid more attention to the picturesque scenery and wonders of nature revealed in this northern part of the State, as the good qualities of my motor had been proven on the way up and I discharged all thought of business from my mind.



Secretary Ewell, of American Motor Company, starting on his testing trip into the Maine Hills, where 20% grades are considered fairly level roads. Ewell compares them to natural "roller coasters."

Although never out of view of the mountains the rider found some fairly flat country such as is shown in the picture.



MANY IMPROVEMENTS IN STURDY THOR 4.

**All Three Types Show Refinements, But 4 H. Single Embodies Most Interesting Changes—
Original Design for New Clutch Lever, New Rims for Larger Tires, Improved
Carburetor Control and Wider Exhaust Valves on 5 and 7 H. Models.**

AN inspection of the Thor models for 1913 discloses no radical changes in the 5 h. and 7 h. machines, variations from former types being in the nature of refinements rather than actual departures. In the 4 h. model, however, there are several changes which promise to provide stronger

heavier spoke flanges and cone sleeves, making an absolutely rigid front wheel and also assisting in the strengthening of the front fork. The front wheel has a 7/16-inch knockout axle, giving a solid head at one end and a castellated nut at the other, making it impossible for an accident to occur

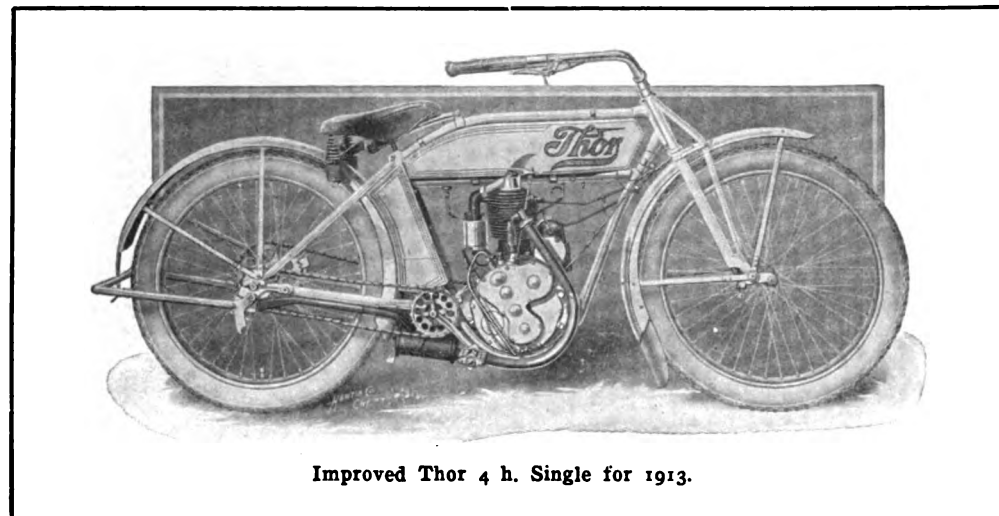
known Thor internal undergeared type, which does away with the short chain as embraced in some other machines. One of the exclusive features of the new machines is the two-speed gear and control, fitted in the rear hub. This will be given a detailed description in a later issue.

While not cumbersome, the Thor muffler is unusually effective, and is supplied with a long discharging pipe to the rear. The oil pipes and crankcase breather are, as usual, very large, so that the danger of clogging is overcome. The supply of oil to the mechanical pump in the lower section of the gear case is controlled by a needle-valve. The Thor has always had roller bearings in the connecting-rods and these are continued. Wire and cable controls are used, with a separate control for oil, gas and the exhaust valve lifter. The latter is manipulated by a latch on the right handlebar.

Sturdy Spring Fork.

The 1913 spring seatpost will show no changes, the rocker-arm style having given such satisfaction that it is retained intact. This vital feature has undergone the most severe tests during the past season, with perfect results. Greater clearance is afforded between the tires, forks and mudguards to permit of the use of large tires and non-skid chains, should the latter be needed. The tires on the 4 h. model will be 2½ inches wide, and on the two other types the tire width will be 2¾ inches. The spring fork, as before stated, is exclusively a Thor product. Strong double-plunger and recoil springs are located in the main barrels of the truss fork, and it is here that the force of the shock is received and absorbed. The springs are entirely hidden from view, so that the forward section of the frame is given an unusually compact appearance.

The prices for the 1913 Thor models will be as follows: 4 h. single, white or blue finish, \$225; 5 h. single, \$240; 7 h. twin, \$290. The two-speed gear is an extra, and will be fitted for an additional charge of \$40.



Improved Thor 4 h. Single for 1913.

construction and increased ease of action. One point worthy of special attention is that almost the entire Thor machine is made at the Aurora factory. Modern appliances are in use for turning out the most intricate and efficient mechanism for the equipping of the three types, and in this way the Thor designers and mechanics have the machines under their personal supervision until they are ready for shipping. The carburetor, clutch and brake are all produced in the big Thor plant, as is the new spring fork which is introduced this year by Designer Ottoway.

Three 1913 Types.

For the season of 1913 the Thor company will offer three models, under the following headings: "13-M," of 4 h.; "13-W," of 5 h., and "13-U," of 7 h. Magneto ignition is standard on these machines. One of the improvements noted concerns the mechanical inlet valves, an outside spring and extra heavy rocker-arm being incorporated to reduce wear and breakage to the minimum at this point. Other refinements affect the carburetor, a butterfly valve and twin adjustment for air being resorted to by way of facilitating the mixing operation on the 1913 machines.

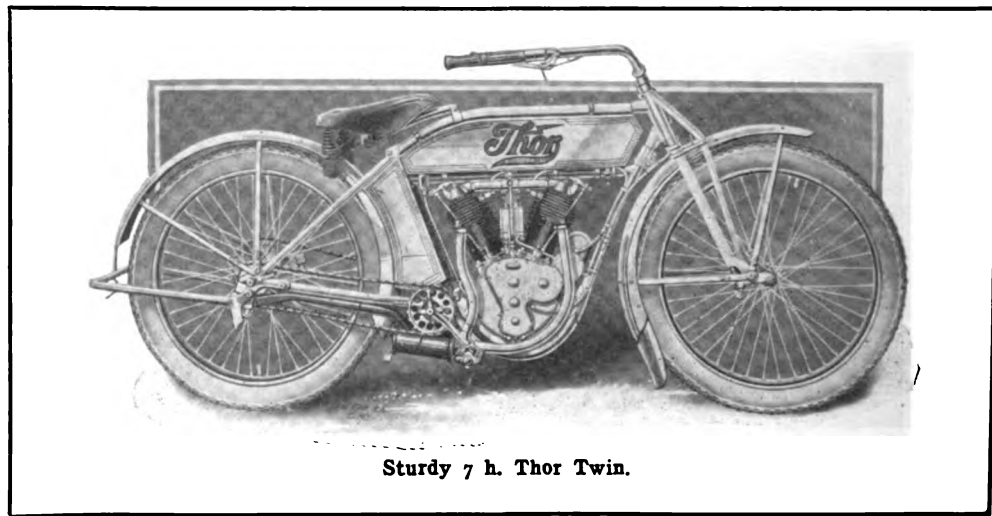
Some of the Improvements.

The Thor clutch has been strengthened by the clutch body being a solid, one-piece internal gear and hub, made from high-grade drop forgings, carefully treated and hardened. There is an entirely new design of front hub in which 5/16-inch balls are used; it has a surface contact on the ball races, and thus gives longer life to both races and balls. The hub also incorporates

through the loosening of the nut. The rims are heavy and are suitable for either 2½ or 2¾-inch tires. The stand has been changed somewhat, and is now so constructed that it will bear the heaviest usage without damage to the clips. The exhaust tube has been enlarged, thus helping to eliminate overheating trouble, owing to the fact that a more open passage is afforded for the emission of the exhaust gases.

Cylinder Changes.

Model 13-W, with 5 horsepower, embodies all the above improvements in addition to changes in the cylinder; larger radiating flanges are now afforded, and the compression space is increased so that overheating is still further guarded against. All models will have chain transmission of the well-



Sturdy 7 h. Thor Twin.

The SUCCESSFUL DELIVERY VAN

ITS CONSTRUCTION AND OPERATION

by D. R. HOBART

Simple and Effective Book-Keeping Methods—Handling the Driver Problem — Value of Systematic Advertising.

ONE important question in a motor delivery business has never received a definite answer. This is, when should an old car be replaced by a new one? It is easy to say, "when the car has reached the end of its usefulness," but that stage of its existence can generally only be determined by the failure of the machine to perform its work at all. One method which the writer has found of great value, and which has resulted in economy, is the "personal" record of each car, kept from the time that the car is put into service. This record is a matter of simple book-keeping; each car "opens an account" with the company, and is credited with its earnings and debited with its purchase price, interest on the money invested in it, its repairs and tire mileage, etc. Periodical examination—say, every month—of the debit side will show when the car needs an overhaul by its makers, but if the price of such an overhaul exceeds 50 per cent. of the cost of the car per year, it is probably better to dispose of it and purchase a new one. On this matter, the company is dependent in a good measure on its repairman, and it is to the firm's interest to get, and keep, an employee in that capacity whose integrity is proof against salesmen's offers of "rake-offs." A careless or dishonest repairman can put a crimp into a delivery business more effectually than anyone but an absconding cashier. He takes somewhat longer, but results are just as certain.

Simple Book-Keeping.

The accounting of a delivery firm should be the simplest possible. In recent years there have sprung up business systems, which claim to develop proper book-keeping, card-indexing and like systems for any business. Some of these are applicable to all mercantile enterprises; most of them are useless for manufacturing or delivery purposes and valuable only to their perpetrators as money-getters. They are designed by men who are ignorant of the special conditions existing in enterprises dealing with motor vehicles, and are a waste of time and money to install or even consider. The ordinary methods of book-keeping will suffice, special conditions being capable of being handled by any good book-keeper. If a special system is necessary, there are firms who can meet the need, being specialists in garage and like accounting systems. Avoid the business-system as you would any other useless outlay.

Every business has its leaks, some of which can be stopped. In a motor delivery system, outside of the careless repairman, the next most important source of loss will be poor driving. Carelessness on the part of a driver may result in a smash-up involving damage suits by third parties, not to mention the loss from damaged cargo. A driver that has his car too regularly in the shop should be replaced by another as soon as possible. Faked damage suits are a means of livelihood of certain characters (and certain lawyers) in large cities, and it is occasionally better to compromise rather than fight them in the courts. Usually, a vigorous fight will settle such demands once and for all, and in the hands of an insurance company such faked suits die away rapidly. The writer has known of one concern which got into financial straits through a faked suit and was obliged to reorganize to obtain funds to fight it, which they did successfully. Hence, to have all the cars insured is a double safeguard, as fakers are loath to bring suit when an insurance company is involved.

The Driver Problem.

Youths trained to drive a particular make of car and recruited from the ranks of department-store delivery boys usually make good drivers for our purposes. They are more or less familiar with delivery work, also, and are valuable in that direction. It is obviously impossible to lay down any hard-and-fast rule as to recruiting drivers, as conditions vary in different localities. The chauffeur should be avoided, as he is usually of bad habits when applying for motorcycle or tricar driving, but possible exceptions may be made for drivers of department-store cars. At any rate, the manager of the delivery system must expect to be nothing short of a training-school for chauffeurs, whether he likes it or not, as his drivers will leave him as soon as they learn driving, seeking a post as chauffeur on some truck or pleasure motor car. This is more evident as the number of drivers employed increases. The remedy, wages as large as those of a chauffeur, is beyond the means of most delivery concerns.

Advertisement.

In organizing a delivery business, dependent upon the business-houses for custom, advertisement plays a very important part. The bodies of the cars should be of distinctive color and should bear the name of the

concern in contrasting, large letters. If possible, the drivers should be uniformed, if only in clean khaki suits. There should be an announcement run regularly in one or more papers that local merchants read, and the stations themselves should have large signs on them. By this is not meant elaborate and costly electrical or other devices, but those of sufficient form and color to attract the possible customer. It is often desirable to have a car painted to suit a regular or contract customer, carrying his name, etc., but the driver should wear the company's uniform and be subject to its discipline. Pages could be written on the unhappy results of having company's cars driven by customer's drivers, but the best advice on the subject is *don't*. Follow the Quaker's advice: "Keep thy business, and thy business will keep thee."

PLEA FOR PRACTICAL WORK.

EDITOR MOTORCYCLE ILLUSTRATED: Your recent editorials on hill-climbing (or the lack of it) and like really useful contests voices the opinions of the serious riders of the motorcycle. Gasoline is going up in price and more of it is being used every day during the riding season by motorcyclists and automobilists, while the various other industries are using internal combustion engines more and more. And under these conditions, the trade papers have been full of what? Speed records by boys on steeply-banked tracks, riding machines with special gearing, cams, valves, etc. Of what value are these to the tourist, the R. F. D. man or the man who rides for business or pleasure? None whatever. As far as the writer can see, they bring money only to the promoters of the tracks, and when an accident occurs there must be parents or relatives who prevent prospective motorcyclists from buying machines, and the pastime thus loses a convert who might be infinitely more valuable than a dozen of the "90-mile-an-hour-champions."

The majority of our endurance contests cannot be compared with the English six-day trials, or even the London-Edinburgh run. The West seems to be the only part of this country where real contests of this nature are held. The East, in this connection, can well be called "effete." The Short Grass Tour is probably the only *real* endurance run for motorcycles held in the United States. But there was apparently no question of economy during this tour. What is wrong?

STANLEY R. SEBERRY.

A. M. C. MODELS SHOW MARKED SIMPLICITY

Number of Parts Has Been Reduced and Special Attention is Given to Interchangeability for 1913—Improved Valve System, New Style Tank and Numerous Refinements.

SIMPLICITY and interchangeability of parts are two of the features of the 1913 A. M. C., the product of the Allied Motors Corporation, Chicago, Ill. A new form of tank and a black, rubberoid finish on the luggage-carrier, and stand handlebars are distinctive features of this product of A. J. Musselman. Two models, a 4 h. single and a 7 h. twin, are announced, the bore of the single model being $3\frac{1}{4}$ and the stroke 3 43/64 inches. The prices are: single model, \$225, with either V-belt or chain drive; twin model, \$250, with chain drive only.

The number of component parts has been reduced, this feature tending toward the simplicity so desirable in any mechanism. The feature of interchangeability is also very desirable, and is most noticeable in the new twin model. The valve system in particular has been improved, the stems be-

ing threaded instead of grooved and slotted, and the valves are now held by a taper-nut joint which is readily adjustable. A single cam operates both valves of the one cylinder, and there is a separate exhaust-valve lifter lever on the handlebar.

All bearings are large, and alloy steel—with vanadium the chief alloying metal—is used in the frame parts as the fork tips, crank-hanger and frame head. The new style tank has two removable and separate compartments for gasoline with an interior compartment for oil. The fuel compartments are hinged together around and over the top tube and brace tube, making for a neat appearance. In a channel in the tank the speedometer tubing is to be run, and two filling apertures are provided. The oil tank occupies the center of the whole tank arrangement. The gasoline capacity is three gallons.

Control is by twisting grips with cable connections, hidden in the handlebars. The fork is of the double-acting rocker type and a rocker type spring seat mast is fitted. The muffler has a spring-locked cut-out and gives direct discharge from the exhaust pipes. Wide mudguards are fitted, and the rear guard is hinged to permit of ready removal of the wheel or tire. The rims are of the new size, and will accommodate 28 x 2½ or 29 x 2¾ inch tires, which are of Continental make as standard. Heitger carbureters, Eclipse clutches and Bosch magnetos are standard equipment on this product, and the latter are mounted in rear of the motor cylinder on an aluminum base. The color scheme will be cream, with black rubberoid on certain parts and nickel on others. The letters "A. M. C." will be placed on the tank sides. On the whole the models create an excellent impression.

OCTOBER STATISTICS.

F. A. M. membership gains for October were as follows: Maine—unaffiliated, 1; Massachusetts—affiliated, 5; unaffiliated, 11; renewals, 11; Rhode Island—renewals, 3; Connecticut—renewals, 2; New York—affiliated, 8; unaffiliated, 5; renewals, 21; New Jersey—affiliated, 4; unaffiliated, 12; renewals, 9; Pennsylvania—affiliated, 25; unaffiliated, 10; renewals, 12; Maryland—affiliated, 2; unaffiliated, 1; renewal, 1; Virginia—unaffiliated, 1; renewal, 1; W. Virginia—affiliated, 1; unaffiliated, 2; S. Carolina—renewal, 1; Tennessee—unaffiliated, 7; renewal, 1; Georgia—unaffiliated, 1; Florida—affiliated, 1; renewal, 1; Alabama—unaffiliated, 4; renewals, 3; Texas—affiliated, 24; unaffiliated, 5; renewals, 2; Kentucky—unaffiliated, 1; renewal, 1; Ohio—affiliated, 52; unaffiliated, 19; renewals, 16; Indiana—affiliated, 28; renewals, 12; Illinois—affiliated, 34; unaffiliated, 3; renewals, 17; Missouri—affiliated, 1; unaffiliated, 1; renewals, 7; Wisconsin—affiliated, 2; unaffiliated, 8; renewals, 5; Michigan—affiliated, 2; renewals, 2; Minnesota—affiliated, 1; South Dakota—affiliated, 4; Kansas—affili-

ated, 36; renewals, 12; Iowa—renewals, 2; California—affiliated, 29; unaffiliated, 5; renewals, 34; Utah—unaffiliated, 1; Colorado—unaffiliated, 5; renewals, 3; Arizona—affiliated, 3; Idaho—affiliated, 1; Oregon—affiliated, 1; Washington—affiliated, 7; renewals, 2; total—affiliated, 271; unaffiliated, 103; renewals, 181.

TWENTY-TWO motorcyclists of Savannah, Ga., all riders of Thor machines, recently made a Sunday run to Wheelmen's Inn. Not an accident occurred during the run. It is expected that a Thor club will be formed in Savannah.

A 25-MILE WINNER.

IN a recent 25-mile race held in Madison, Wis., Henry Pehrson, of Rockford, Ill., took first place. E. Esther, of Madison, won the second prize, while Carl Swenson, of Rockford, finished third.

I. A. CARP, of Milwaukee, Wis., who expects to reach the summit of Mt. Spokane on a motorcycle, is believed to be the first person to attempt the stunt.

NEWARK NOTES.

A POOL table was presented to the New Jersey M. C. at the last meeting by Fred. Cordes, one of the members, with the proviso that it be used every night. It is expected to be a good means of bringing the lagging members out of their shells more often.

Miss Katherine Brunner, of Newark, applied for membership in the club recently, but as there are at present no ladies holding membership in the club, the membership committee elected her an honorary member. Miss Brunner is a Pope rider, and is the only lady solo rider in Newark.

Walter Goerke, one time amateur champion, recently returned from a three-week's hunting trip in the Maine woods. He claims that he could have shot four deer a day, but he didn't see the use of killing them off at that rate. He shot 400 cartridges—or cartridges—he can't remember which.

RUMORS of a board track for Baltimore have again cropped up. This time, it is said, one of the biggest promoters in the country has his eye on this city.



Members of the Excelsior M. C., of Elwood, Ind., Ready for a Recent Road Trip.



Pennsylvanians On New England Jaunt

by
B. F. CONNOR



B. F. CONNOR, of Wilkesbarre, Pa., accompanied by E. B. Wagner, Ted Burneford and Joseph Helfrick, recently made a flying trip through New England by motorcycle, and the experiences of the party are dealt with briefly in the article which appears below. Considerable rain was encountered, but the riders were not bothered by mechanical trouble until a downpour at the close of the trip brought on short circuits. Connor, who is the Indian agent in Wilkesbarre, writes as follows:



Connor.

Once at the top we were anxious to get down again, as the air was very cold and heavy overcoats would have been welcome. We lost no time in getting back to the hotel.

After crossing the ferry to Fishkill the next morning we proceeded to Poughkeepsie, Amenia and Great Barrington; thence over good roads through Lee to Springfield, Mass., climbing Jacob's Ladder with ease. We reached Springfield at 7.15 p. m. and put up at a hotel for the night. The next day we visited the Indian Wigwam; we were shown through the factory and later taken out to lunch by a repre-

sentative of the Hendee company. During the afternoon one of the testers took Helfrick out for a spin and he enjoyed a fine ride. We decided to remain in Springfield a second night, much to the delight of Helfrick and Wagner who congratulated themselves upon the fine room assigned them. However, they were not very well pleased with the bill.

Visit to Shoe Factory.

We spent the following morning in Springfield and left for Boston about noon. We found good roads through Worcester to Boston, arriving at the latter city in good time. We proceeded to the store of G. N. Holden, Indian agent, where we left our machines. That evening we enjoyed a good show at Keith's theatre, and the next morning found us spinning along the road to Brockton. Here we visited the Walk-Over shoe factory, as Burneford of our party was



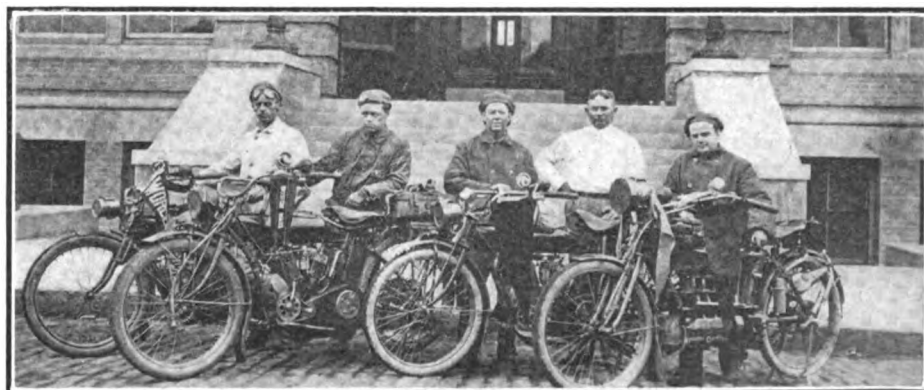
Helfrick.

interested in that line. We received excellent treatment, one of the office staff showing us through the factory. After dinner we lined up in front of the factory building and had our pictures taken.

Shortly after this last performance we were again on our way, reaching Providence without incident. We did not remain in Providence but continued down the coast to Narragansett Pier. One finds this part of the country rich in scenery, and motorcycle traveling is ideal. We spent the night at the pier and it was unanimously agreed to visit the barber. On Sunday morning we rode on to New London, arriving there about noon. Then we were delayed a couple of hours on account of rain. It cleared off about the middle of the afternoon and we again took to the road, which was none too good when we reached Clinton Horn. After leaving this point we paid 15 cents each for crossing the Saybrook bridge which spans the Connecticut River. We then continued on to Clinton, where we had the pleasure of staying for two days, a heavy rain which continued during that period making it impossible to ride.

On the Home Stretch.

On Monday night we rode 25 miles to New Haven, where we purchased some chains for our tires from the Indian agent; we returned to Clinton the same night. Tuesday morning we set out again and found the roads to New Haven very muddy.



At the Walk-Over Shoe Factory, Brockton, Mass.



Burneford.

A heavy thunder storm came on and there being no shelter worthy of the name nearby we all got drenched. We had stopped at the roadside and when trying to start found our magnetos all short-circuited. Helfrick and Burneford were unable to dry out their magnetos and were forced to leave their machines in the woods all night and walk six miles to Beacon Creek, where they spent the night in a small hotel. The writer, after considerable trouble, got his machine in motion and rode on. The next morning we were busy making repairs as best we could and finally we got under way. With pennants which we had collected along the route flying from our machines and bright weather once more we reached Wilkesbarre in good time and agreed in saying that we were glad to get home.

AN INTERESTING STATEMENT.

WILLIAM HETHERINGTON, JR., a Brooklyn motorcyclist, makes the following interesting statement of his operating expenses on a twin seven for 1912 to September 30. His total outlay for gasoline while covering 5,000 miles was \$15.40, and the oil used during the same period cost \$3.40; this gave a total of \$18.80 for fuel and oil for 5,000 miles, or an average of .00376 per mile. Repairs for the period mentioned footed up to \$5.10 so that the total expenditure was \$23.90. The rider figures that it would have cost him \$100 to cover the same territory by train, and that the saving in favor of the motorcycle is therefore \$76.10.

CALIFORNIA TOUR.

W. H. VAN SLYKE and **T. W. Clark**, of Eureka, Cal., recently completed an extensive trip through California, visiting Los Angeles, San Bernardino, Redlands, San Joaquin, Bakersfield, Fresno, Santa Rosa and a number of other smaller towns.

A GOOD ROADS ADVOCATE.

MOTORCYCLISTS of New York State will be interested in the announcement that Governor-elect William Sulzer is a Good Roads enthusiast. Not long ago he spoke at length in behalf of road improvements in the New York House of Representatives.

TRENTON'S ACTIVE CLUB.

THE Indian M. C., Trenton, N. J., is one of the liveliest organizations of its kind in the state. Regular runs are held to the shore or through the mountains every two weeks, and small parties of the members frequently make informal jaunts.

Not long ago one of the club members was run down and injured and the squad quickly raised \$75 to assist him in meeting bills for medical services and for other matters incident to the accident. This spirit has created an excellent impression among the townspeople, and as a result motorcyclists are now receiving more favorable consideration in Trenton than ever before. **R. C. Crist**, former president of the club, recently underwent an operation for appendicitis.

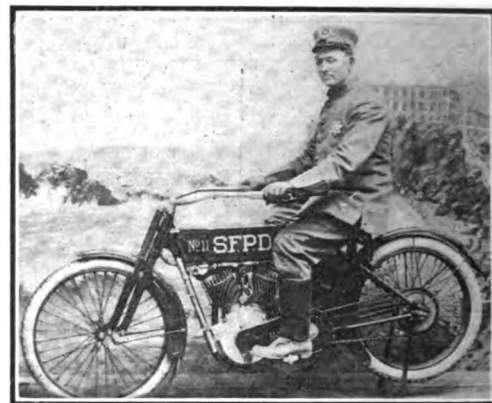
COLUMBUS M. C. OFFICERS.

COLUMBUS, Ohio.—At a recent meeting of the Columbus (Ohio) M. C. officers for the coming year were elected as follows: **Roy Knight**, president; **Henry Deeever**, vice president; **W. H. Ferguson**, recording secretary and **George H. Bangham**, financial secretary and treasurer.

The reports for the year showed the club to be in good condition. Since the colder weather set in more interest is being taken in club affairs. The motorcyclists of Columbus have been notified to provide themselves with front and rear lights after November 29 when the new motor ordinance becomes effective.

SALT LAKE OUTING.

ABOUT forty members of the Salt Lake City M. C. recently made a Sunday run to Provo and return. Much interest is shown in the newly organized club and already the members have enjoyed a number of social runs.



A FRISCO MOTOR-COP.

JOSEPH HOLLE, Harley-Davidson agent in San Francisco, forwards the accompanying photo of motorcycle officer **Robert E. Lindsey**. Lindsey rides one of the Six Harley-Davidsons made especially for the police department of San Francisco.

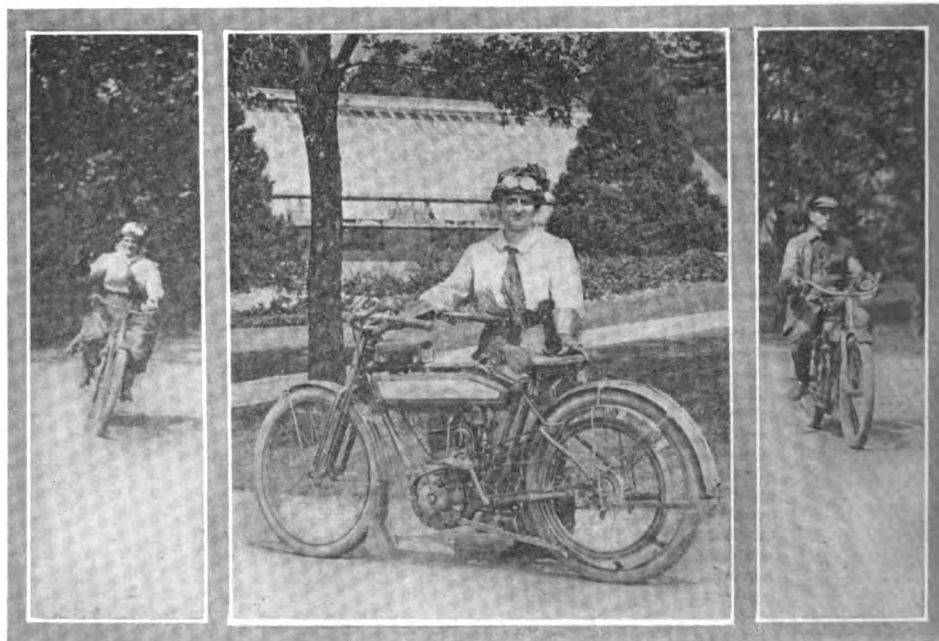
CHALK UP TWO MORE.

SECRETARY GIBSON reports the Corner M. C., of Rawlins and Cheyenne counties, Kan., and the Peekskill M. C., of Peekskill, N. Y., as affiliating with the F. A. M. during the week ending November 2.

FOUND POOR ROADS.

MEMBERS of the Waco (Tex.) M. C. recently participated in a run to Dallas and found bad roads to such an extent as to make the trip a disagreeable one. The roads were particularly poor beyond Italy.

UP to the present time 253 motorcycle tags have been issued for 1912 in Lima, Ohio. This is more than twice the number for last year.



A READING PACEMAKER.

MRS. W. G. SCHAEFFER, who appears in the small panel at the left and in the center picture, is the wife of the genial proprietor of the Penn Cycle & Motor Co., of Reading, Pa., and a motorcyclist whose road record is a remarkable one. She accompanies the Reading M. C. on all its runs, having been made an honorary mem-

ber, and has shown the rear tire of her Reading-Standard single to more than one of the boys. Not long ago Mrs. Schaeffer accompanied her husband on a trip from Reading to Bridgeport, Conn., on which 290 miles were covered on two consecutive days, the actual riding time being 12½ hours. Mrs. Schaeffer piloted her own machine and was always up with the schedule.



NORWICH M. C. DINES.

C. V. PENDLETON, JR., 10 Broadway, Norwich, Conn., a dealer in motorcycles and sporting goods, forwards the accompanying photograph of the Norwich M. C. members who participated in the recent banquet. An excellent menu

was supplemented by a high-class entertainment program. The present officers of the club are: C. C. Simpson, president; William Bode, vice-president; C. V. Pendleton, Jr., secretary-treasurer; H. F. Burdick, captain, and Peter Desjardins, lieutenant. The banquet was held at the Auditorium Hotel in Norwich on October 26.

PECK CLEANS THE BOARD.

LOS ANGELES, November 11.—A hard rain today again kept the attendance down at the Stadium. Ray Peck carried off the honors, winning every event in which he was entered. In the second race Humiston had a slight lead, but was disqualified for fouling Whittler, thus giving Peck, who was in second place, another first to his credit. The contests for unported machines were as close as the faster races, Rognon in each case sliding ahead at the very finish.

OHIO'S HIGHWAYS.

COLUMBUS, Ohio.—The Ohio State Highway Commission has completed a huge road map of the Buckeye State, 10 feet square, which shows every road within the limits of the state. The map is the work of the commission, assisted by all the county engineers in the 88 counties of the state. It shows the system of inter-county highways as devised by the commissioner and urged upon the Legislature, and indicates that there are about 89,000 miles of highways in the state.

OTTO PRIEDE, well known to all motorcyclists in Detroit, Mich., is making an extensive trip throughout the United States on his motorcycle. His route is from his home to Kentucky and Florida and along the southern route to San Francisco.



Homer C. Garner, New Head of Harley-Davidson Export Department.

CHICAGO M. C. STAFF.

AT the annual election of the Chicago Motorcycle Club, held in connection with a grand ball and entertainment, the following officers were elected: R. T. Purdy, president; F. E. Yates, vice-president; Donald Hull, secretary, and A. Willen, treasurer. William S. Covington was named road captain, with E. Schaddie and Frank Nelson as his lieutenants.

BALTIMORE BREVITIES.

BALTIMORE, Md.—The rough riders of the Maryland M. C. had their inning on Sunday, November 10, on a run to Havre de Grace. This was the first trip over the Harford pike this season, and some of the hard going was eliminated by taking the route through Loch Raven. On Sunday, November 3, the members of the club tried out the new boulevard to Annapolis, which has just been thrown open. This is one of the finest stretches of road in the state and the fine weather on that day brought out a large attendance, there being a number of fair tandem riders to keep the boys in check. The fight for the diamond studded attendance medal is still being fiercely waged, with Nelson Johnson holding the lead.

FOR SPARK PLUGS.

TOURISTS on long trips who wish to carry one or two spare spark plugs may utilize a leather cigarette case, or even a small leather cigar case. If two plugs are to be carried a piece of stiff leather or a small block of wood should be placed between the plugs to avoid damage through having them strike or grind together.

PECK SIGNS NEW CONTRACT.

RAY PECK, of Los Angeles, well known to Eastern riders through his remarkable riding at the Newark Motordrome during the past season, will hereafter ride tandem. Ray signed a life contract on November 14 with Miss Bessie Fyan, also of Los Angeles. Although Ray is not competing on the tracks just now he fully expects to come East next summer and ride on the Eastern bowls.

NEW WANDERSEE QUARTERS.

DETROIT, Mich., November 11.—Detroit is to have one of the finest motorcycle and sporting goods houses in the Middle West, William E. Wandersee having already started work remodelling his building into a plant that will be a model of its kind. During the alterations the Wandersee store has been moved from the old location, at 129 Gratiot, to 227 Gratiot. Mr. Wandersee proposes to spend \$30,000 on the repairs.

OVER 500 motorcycles were sold in Baltimore during this year, one dealer alone disposing of half this number. The demand for second-hand machines has been greater than the trade could supply.

A MEETING was held in London, Eng., recently for the purpose of forming a motorcyclists' association, restricted to riders of both sexes who come within the official definition of an amateur.



From Reading to the Ohio Line

GEO. K. SNYDER

FOLLOWING is an unusually interesting story of a tandem trip from Reading, Pa., to Wheeling, W. Va., written by George K. Snyder who piloted his Harley-Davidson machine over the long route successfully with George P. Eger as his passenger. The fact that the machine carried double throughout the journey naturally adds to the interest aroused in the performance. Snyder's narrative is as follows:

In addition to carrying my regular tool kit I filled an extra supply bag which I strapped to the saddle. It contained a 12-inch wrench, two spark plugs, one control wire, half a dozen patches and a can of cement; one pair of belt clamps, a can of belt dressing, some straps, tire tape and a blowout shoe. A camera was held by a heavy strap running across the handlebars and fastened just back of the grips. Carried in this manner it was protected from all jars and bumps and was not likely to be damaged in a fall. With this general equipment I was ready for the road.

It was originally understood that six riders were to make the trip, but when the day arrived to start four of the prospective tourists showed unmistakable symptoms of "cold feet," and Eger and myself were left to undertake the trip alone. We started at 3 o'clock in the afternoon and made good time to Wernersville, where we were compelled to seek shelter from a heavy thunder shower. Later we headed for Harrisburg over a fine pike road. We were not bothered except at the toll gates, which were only a few miles apart, and it was some consolation to know that these will soon be done away with, as the State has taken possession of the pike between Reading and Harrisburg.

An Unusual Accident.

We were just rounding a hill beyond Hershey's Park when with a cannon-like report a blow-out informed me that my rear tire had suffered. After repairing the inner tube as well as possible, we attached the blowout shoe, and in half an hour were again spinning along. We had not ridden two miles when the rear tire was again going down, so after working our way to within a few miles of Hummelstown, by occasionally exercising the pump, we decided that my companion should take the trolley to Harrisburg. I figured that I would reach the capital city more easily with reduced weight on the rear tire. A short distance further on, where the main line of the P. & R. Railroad crosses the pike, my blow-out shoe caught in the rails, and I was thrown 10 feet into the air, landing on my head and hands. The machine landed against a tree.

I found part of the shoe wedged between the tracks and shredded to pieces. This was the most peculiar motorcycle accident I had ever heard of, but I was thankful that I escaped with a skinned knee and a bruised hand.

After bending things into shape again and getting some tire tape into service I was ready to start, but found that the front rim was bent almost beyond repair. I was certainly in an awkward position, alone with disabled machine and unable to fix it. I tramped across the hills in search of a farmhouse and was fortunate in finding one less than half a mile distant. I had some trouble in convincing the farmer that he should take me to town, which was only accomplished by making him a generous offer. He rigged up a team finally, and we were off for the machine, which we had trouble in getting into the wagon. We arrived at Harrisburg at 9 p. m., the last hour having been made in a heavy rain. That part of the trip I will never forget. I placed the machine in a garage and started to hunt for George. He had arrived by trolley about three hours ahead of me. I found him at the Hershey House.

On the Trail Once More.

After breakfast the next morning we went to the garage and loaded the machine into an express wagon and started for the Harley agency. Heagy Brothers, the proprietors, gave us the best of attention, and at 9:30 a. m. the

repairs were completed, including the placing of a new Goodyear tire on the rear wheel.

We left Harrisburg at 10 o'clock, and were escorted as far as the Harrisburg Bridge by one of the Heagy boys. We had macadam roads to Mechanicsburg and good dirt roads from there to Carlisle. Here we visited the Indian college and a few other interesting points. We ate lunch before leaving for Shippensburg. On leaving Newville we took the wrong road, which led to Doublin Springs, and thereby encountered nine miles of rough mountain road. We discovered our mistake finally and went back to Newville; there we got on the right road to Shippensburg.

We had a fine State road, a 22-mile stretch, from Shippensburg to Chambersburg, and spent some time in the latter place viewing the town. At 3 o'clock we started for McConnellsburg. We found good roads until we reached the foot of the Tuscarora Mountains, which are 2,400 feet above sea level. There is a $4\frac{1}{2}$ mile grade on the east side and one of $3\frac{1}{2}$ miles on the west. It was with much difficulty that we managed to get up, as the grades are very rocky and sandy. The western slope was in better condition, however, and coasting can be enjoyed to a certain extent. We reached McConnellsburg at the foot of the mountain at 7:30 p. m., and stopped at the Fulton House. We had traveled 134 miles that day.

More Mountains to Climb.

We started rather late on Sunday morning. A mile from McConnellsburg we had more mountains to contend with, which were almost as bad as the first. There were three ranges joining each other, 22 miles from the first to the last. Here riding was unpleasant, and in some places the sand seemed to be bottomless. These hills, unlike some others, have no level stretches, but necessitate a continuous climb from base to summit. At Bedford we ate lunch and had a short rest. From Bedford to Greensburg the road conditions were good, most of the road being new. Then for 10 miles we had unfinished roads, making rough riding, but even this was better than the mountains. Approaching the Allegheny Mountains we were encouraged to find that the mountain was climbed by a fine State road. Here riding was a pleasure and the scenery very fine. We reached Greensburg at 6:15, but did not care to spend the night there, so started for Jeanette, five miles distant. We had good State roads between these places. We found Jeanette to be a fine little town and received the best of accommodations at the Miller House. From Greensburg to Jeanette may be seen soft coal



Snyder and Eger Just Before Leaving Reading on Their Cross-State Jaunt.

mines, oil and natural gas wells, all within a distance of half a mile.

On Monday morning, while making a few minor repairs, we met an old glass worker, who offered to show us through one of the largest glass mills. This was quite fortunate, as strangers are not usually admitted for sightseeing. This was the most interesting experience we have ever had.

When Eger Was Dropped.

At 10 o'clock we started for McKeesport, a distance of 30 miles, and found fine roads leading out of town. The following is an instance where the joke was on George: While descending a steep hill I struck a gutter, or water breaker, as the Westerner would call it, and somehow it threw friend George off his seat. I did not notice his absence, and about four miles further on I was surprised to find him missing. I went back and found him sitting on a fence enjoying the laugh with me. With the exception of a skinned shin he was O. K. He mounted once more and we were on our way. We arrived at McKeesport at 1:30, and spent the rest of the afternoon in sightseeing. At this point the tourist will find the National Tube Works of interest, they being the largest of their kind. The macadam roads make riding very agreeable on the winding boulevard over the hills, and here the scenery is excellent.

On Tuesday morning we rode to Pittsburgh, a distance of 18 miles, over State roads. Within the city limits there is nothing but macadam and asphalt pavements. Here is where the motorist must watch his speedometer, 24 miles being the speed limit in the outlying districts and 12 in the city. There are motorcycle cops to follow you as soon as you get to the city limits, but they are reasonable and tell you the regulations. Highland, Schenley and East Liberty Parks will be found fine for riding and of great advantage, as most of the points of interest can be seen from these elevations: Carnegie Technical Memorial Hall, Public Library, Carnegie Roof Garden and the wharf on the Ohio River. Looking over East Pittsburgh the rider can see the famous Westinghouse Motor and Electric Co.'s plant covering five city blocks.

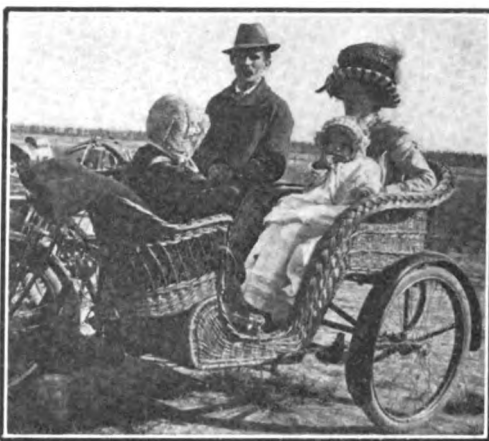
Over the Old National Road.

On Wednesday morning we were rolling along the old National Road headed for Wheeling, via Little Washington. The road conditions were fair. For the entire distance of 58 miles the rider will find himself in the oil and natural gas district. We passed many old and new derricks, also quite a few soft coal mines. Our time being limited, we could not spend much time in sightseeing. We had to reach the Ohio river by 7 o'clock, as the boat which was to carry us back to Pittsburgh runs only every two days, and we could not afford to miss one. Approaching Ohio the roads are generally poor, with very few good stretches. Sand is plentiful.

After having breakfast and overhauling our machines on the following morning we were ready to land from the boat at Pittsburgh and our homeward trip was started. We made directly for Chambersburg, where we arrived Friday morning. We reached that point in good condition, but had two sand spills. From Chambersburg we traveled southward for Gettysburg, the battlefield being our objective point. We found dirt roads. York was our stop for the night, and we arrived home in Reading at 2:15 p. m. on Saturday wet to the skin, for we had been caught in a thunderstorm a short distance out on the road.

We had fairly good weather throughout the tour, and the trip itself can be recommended to any rider wishing an outing in this district. However, at least two weeks should be devoted to it, as we were cramped for time.

Our trip was covered from noon on August 2 to noon on August 10, and the distance was 1,160 miles. We had no engine trouble, one blowout and no punctures nor breakage of any kind. The gasoline consumption averaged a gallon to 89.3 miles, and the total consumption was 13 gallons. We used a 6½ h. p. belt-drive Harley-Davidson.



S. Platten, of Toronto, and Family, with Rudge-Whitworth Machine and Sidecar.

PICKING SIGNPOST COLORS.

TESTS have been conducted in England recently to determine the colors which render signposts visible at the greatest distances, and which are most easily distinguishable in foggy weather and at night. At various points several posts, having different color combinations, are set up and motorists are called upon to assist the authorities by stating which colors appear to be most satisfactory.

A STUDENT, living 18 miles from the Larned (Kan.) high school which he attends, makes the trip to and from school every day on a motorcycle.



A PORTLAND PARTY.

ANDREWS & GAERTNER, M. M. and Eagle agents in Portland, Ore., forward the accompanying photograph of a party of Portland riders. From left to right they are Miss G. M. Slavens, Axel Kildahl, Mrs. Iva

SOME TRACK WINNINGS.

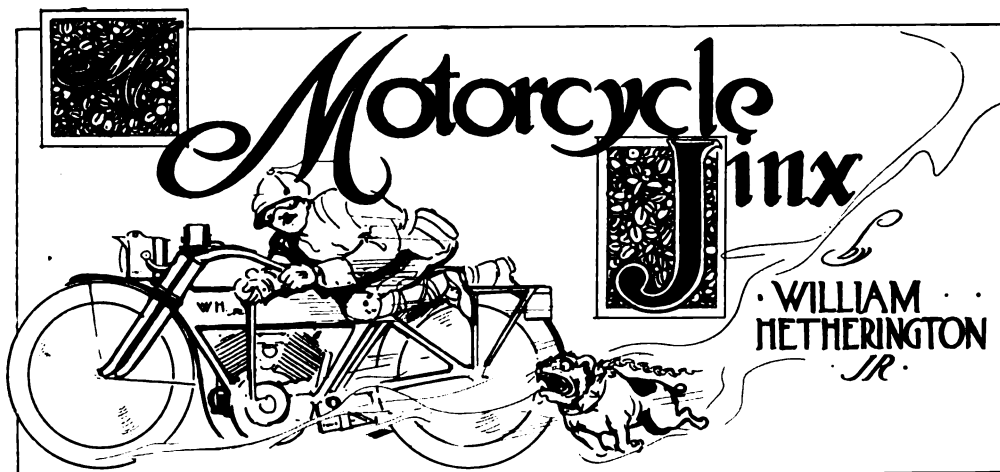
THERE has always been considerable curiosity relative to the incomes of board-track racers, and for this reason a few figures—gathered recently at the Dallas bowl—should prove interesting. They indicate that the conscientious rider need never worry about the price of his next pair of riding breeches, as long as he can find a track open for business. From October 13-27, for example, Harmer pulled down \$185 for his work on the Dallas saucer; Richards earned \$195 during the same period and Trafsky managed to tuck \$315 into his wallet. On the other hand, Swartz earned only \$50 for two weeks, thus establishing the low-water mark for the period. From October 15-27 Jim Cox raked in \$125, Ed Bowen received \$115, and Bruggeman earned \$95. Through his winnings in the events staged between October 20 and October 27 Mike Cafarello increased his bank account by \$130.

PATHFINDERS WANTED.

W. S. BRISSEL, chief clerk of the Touring Department of the Automobile Club of America, announces that his organization is preparing to gather road and hotel information over a wide area, and he is of the opinion that this may be done most advantageously through the use of motorcycles. Accordingly he is desirous of getting in touch with riders who are willing to take up the work for a salary and with their expenses paid. It is taken for granted that no previous experience is necessary, and motorcyclists who may be interested in the proposition should communicate with Chief Clerk Brissel at once. Letters may be forwarded in care of the "Bureau of Tours, The Automobile Club of America, 54th and 55th streets, New York City."

HARRY E. PATTERSON, of Pittsburgh, Pa., is making a trip to Whittier, Cal., on his motorcycle. He was last heard from in Globe, Ariz., at which time his speedometer registered 4,700 miles.

Boyer, S. T. Boyer, Miss M. Traynor, R. W. Potter and Miss Millie Feichtenger. The picture was taken by R. A. Gaertner. The presence of the ladies in the party indicates that the social possibilities of the motor two-wheeler are at last being appreciated in the great Northwest.



THERE is a saying to the effect that Dame Fortune smiles upon the favored few, and while this is not intended to apply to motorcyclists exclusively it cannot be denied that the owner of a single-tracker often has it brought to his notice with particular force. One rider may go through a season—or several seasons—with little or no trouble, while another finds something to worry him at every turn of the road; I am not a trouble-seeker by nature, but I must admit I have been enrolled in the latter class of late. In other words I have had a "jinx," and a mighty active one.

When my old "juggernaut" was traded in for the very latest and finest product of the Wigwam early last Spring, I heaved a sigh of relief, for I took it for granted that I had seen the last of my jinx for a season at least. Without reflecting on the machine in the least, I must say I was wrong; on my first trip I ran into trouble with a capital T. It happened this way: I was about to pass a green rider on the road, and this individual—possibly because he was chagrined at being passed—swerved over to my side of the highway and a glorious mix-up followed. We were both well within the speed limit when the crash came and so escaped personal injuries, but both the machines suffered.

The Demise of a Pesky Pup.

After making a few pertinent remarks I looked over my mount, straightened the pedals, handlebars and front fork and patched a hole that had been punched in the tank; then I was able to make headway, after a fashion. Later in the day another minor spill deprived me of the use of the control lever regulating my spark, and as a result the journey homeward was accomplished at the rate of 35 miles per. I could not maintain a lower speed. When I reached home the damaged machine went into a repair shop and in a few days I was able to use it again. Then I became aware of the presence of the jinx once more.

I was rolling along a suburban road, at peace with the world, when a dog ran out and persisted in snapping at my ankles; I wear canvas leggings and did not relish the idea of having this pup get his teeth in action. Finally through jockeying all over the road for a quarter of a mile or so I managed to

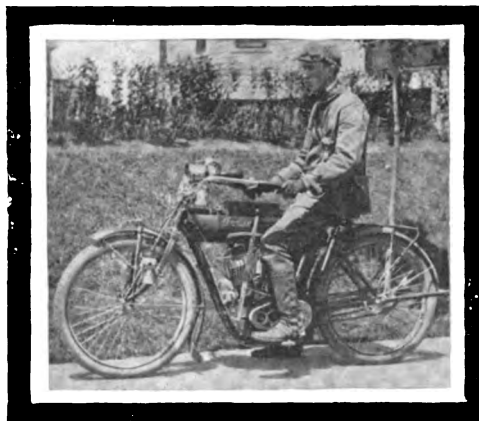
get the dog in front of my machine, and I was not slow to give him his finish. I went down of course, and nursed skinned knees and elbows for a week afterward, but I was consoled by the knowledge that I had given that dog a record-breaking bump.

An Affair With a Spike.

On my next trip I managed to run a huge spike—it looked like one of the railroad variety—through my rear tire, but as I had a cement tube, presumably full, some patches and a supply of patience I went at the repair cheerfully. When I attempted to apply the cement, however, I discovered that the tube was empty. Then I sat down to wait for the appearance of a brother rider from whom I could borrow some. I had just about decided that my jinx had double-crossed me altogether, when I heard the purr of a motorcycle in the distance and a rider came into view. He gave me cement and sympathy and I went on.

Strange to say, from the day of this first puncture until early Fall I did not break into another tire. During the F. A. M. National Tour, while other riders were dropping by the wayside with punctures and divers other troubles, I kept to the trail and exulted over the steady chug-chug of my motor. In fact, for more than 6,000 miles I did not have any trouble. On the first day of the F. A. M. run to Columbus I had the misfortune to lose my tool-kit, but I did not need it throughout the trip.

Finally I became so accustomed to perfect



William Hetherington, Jr.

behavior on the part of my machine that I neglected to give it even ordinary attention, and in a short time my jinx was back on the job. In my last two trips I have had four accidents. On the first of these outings an-

other dog met an untimely end, and on the latter run I figured in a minor spill and severely burned my hand on the exhaust pipe. It is with regret that I acknowledged my failure to turn about and return home when I received the burn, for had I acted upon this advice—given by a friendly motorist who happened to pass—I would not have been called upon to put up with the experience that followed.

On continuing the trip I had proceeded not more than half a mile when a wire hoop, embedded in the dust, sprang up as my front wheel struck it and became entangled with the wheel and fork. The spill was a nasty one, resulting in my making a hurried acquaintance with a doctor. After the "Doc" had patched me up I managed to get back into the saddle, and was inclined to believe that my troubles were over for the day. Once more I was mistaken.

I was riding along at a comparatively slow pace and trying to quiet my nerves, that had been jarred a bit in the hoop mix-up, when



an eccentric automobile driver spun around a turn and bore down upon me on the wrong side of the road. I saw trouble coming but could not dodge it. After I was disentangled from the wreckage I found that I had sustained no new injuries, but a single glance told me that my machine was just about fit for the scrap heap. I was sore—mentally and physically—so you can imagine my surprise and indignation when a minion of the law appeared and placed me under arrest. Yes, sir, that copper arrested *me*! Just think it over. After all I had gone through this last blow was a crusher.

It appears that a policeman always acts upon the presumption that a motorcyclist who figures in an accident of any kind is bound to be in the wrong; at least, that has been my experience with the coppers. Well, to get back to the mix-up, I was ready to call upon the Legal Action Department of the F. A. M., when the judge decided to listen to my side of the story, and of course I was discharged. I have wondered since why my jinx did not stick around and have me fined or sent to jail. Such action would not have greatly surprised me. At considerable expense I managed to get the remains of my machine back home and it is once more undergoing general repairs.

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President

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H. N. CONDUCT,
Secretary

OFFICIALS in charge of the New York and Chicago Shows may profit by a suggestion—now being taken up in London—that attendants and other representatives of the exhibitors be called upon to wear a distinctive badge or button, so that the visitor's problem of getting in touch with some one in authority may be simplified. It may be argued that most exhibiting firms are so well represented that a visitor cannot approach a stand without encountering a company representative, but the fact remains that a seeker for information often addresses several disinterested bystanders before being finally directed to the attendant whose duty it is to receive visitors and answer questions. That the show attendants do everything now within the range of human effort to enlighten spectators is undeniable, but the button or badge system would still further increase their usefulness during the big shows.

SEVERAL companies have in the past supplied their representatives with novelties to be fastened to the lapel of the coat, or even worn on the hat, but these soon won such popularity that they had little or no value as distinguishing marks. Before the show was two hours old they were to be seen on all sides. What is needed is an official symbol, the wearing of which will be confined to attendants and firm representatives. Every query addressed to an attendant at a motorcycle exhibit breaks the ice for business, and for that reason—if not from purely humanitarian motives—the process of interrogation should be shorn of all obstacles. The idea is at least worthy of serious consideration by the show potentates.

FROM a motorcycle traveler—now covering Southern territory for one of the most successful manufacturing companies—comes a letter embodying an idea (the capital is used advisedly) that should strike home to open-eyed dealers and others in the motorcycle field. This traveler has discovered that the motor two-wheeler is growing in popularity more rapidly than facilities are being developed for handling it in the Southern states, and that prospective riders by the score are merely waiting to be introduced to their mounts. In other words, there is a scarcity

of active dealers throughout the South. The traveler calls attention to the all-year riding opportunities in this territory, and states that some motorcycle companies are willing to pay \$25 a week for experienced motorcycle mechanics.

THERE is probably more to these remarks than is gleaned at first thought, and the Northern dealer whose eyes are turned toward more productive territory will do well to give the situation serious thought. That there is a remarkable demand for motorcycles in the South—and that the outlook for the future is excellent—cannot be denied; these conditions coupled with the announcement that dealers and repairmen are at a premium there should suggest prompt action to the seeker for motorcycle business in a new field.

A RECENT decision of the Motor and Accessory Manufacturers' Association, relative to the show exhibits of its members, will be of special interest to those firms producing both automobile and motorcycle fittings. A question was raised as to whether members of the association should be permitted to exhibit in the independent motorcycle show to be held in Chicago, and it has been officially decided that manufacturers who cater to both fields may display their motorcycle products at the coming show without affecting their status in the M. A. M. A. A number of large companies hesitated to take space in the motorcycle show because of an understanding that such action would conflict with the regulations of their association.

"EIGHTEEN THOUSAND square feet of floor space set aside for the Chicago Motorcycle Show, and every foot of it already applied for," reads a bulletin from the Western metropolis. And only a few months back there appeared to be a question as to the ability of the motorcycle trade to handle an independent exhibition!

DEVELOPMENTS have been rapid in the Windy City, and as usual the early bird came into his own. However, we can't all be early birds, and Manager J. S. Vogel still has something interesting to say to prospective exhibitors. Better write now. Vogel

is the man, Chicago the place, and today is the time.

WHILE exonerating the management of the Vailsburg Motordrome from criminal responsibility for the Hasha-Albright accident of September 9, the Essex County (N. J.) Grand Jury recommended in its recent presentment that immediate action be taken by the authorities to prohibit further motorcycle racing, thereby paving the way for regulations that may leave the promoters with a useless board track on their hands. It is far from the intention of the writer to argue that human life should ever be held as cheaply as financial interests—or that purely mercenary concessions should outweigh the dictates of reasonable judgment—but it would seem that the recommendation of the Newark solons is unduly harsh. The Vailsburg accident was one to bring any official body up with a sharp turn, but that it justifies a prohibitive racing edict may be questioned.

HOWEVER this point may be disposed of it cannot be denied that there is food for thought in the Newark jury's presentment, particularly in the statement that board saucer racing is "fraught with such reckless exposure to the lives of the competing riders as to render it closely verging on criminality." This argument will bear modification, of course, but the fact that it has been unqualifiedly embraced in such a document should move promoters and riders to greater caution for the 1913 season. It should be the aim of track managers to prove that motorcycle contests on board saucers are not "verging on criminality," and to this end reasonable restrictions must be placed upon racers and advantage must be taken of every structural safeguard in track building.

ARE we coming to the all-black motorcycle? English designers appear to think so, and their leaning in this direction is evidenced by a 1913 crop of black fittings and accessories that formerly sported nickelplating. Britishers have gone so far as to turn out machines with hardly a spot of nickelplating in view, but as yet the demand for these mounts is restricted. Several English firms are now producing all-black handlebars, horns, lamps and generators and riders appear to favor them.

Hitting The

by
**ELMER
H.
GRESS**

DAYTON NEW YORK TRAIL



BY WAY of introduction, I should state that it was on one of those frigid nights last winter that the Flying Merkel squad met at the home of one of its hospitable members to participate in a chuggers' buzz 'bee. Weird tales were expounded relating to unattainable speed and blood-curdling adventures that were supposed to have been the crowning feats of the riders for the season that had just closed. The steel bronchos had been relegated to

their cold-season pasture, and the most interesting dope the motorists could thresh out concerned the prospects for the next summer. Finally the boys agreed on that night that they would feature the summer by making a trip from the Gem City of the West to Boston, and later to the home of the Giants and the Great White Way.

Having always been more or less of a boulevard rider, I decided it would be wise to get in condition for this proposed trip. So about the time the blue birds were aeroplaning to their summer resorts, I started on my systematic training course. I had never been intimately acquainted with the guy "who put the speed in speedometer," so my system began with a few lessons on this very important feature. Little by little I progressed until by the middle of August I was in perfect condition, and then I took the final examination. This called for pedaling up a long, steep hill without the aid of the motor, riding through a young river, making a 360-degree skidding turn on an oiled road without dismounting—and making a mile go-as-you-please in less than nothing. I then looked up my partner, Leo Kramer, and we sizzled out of Dayton on Saturday afternoon, August 31, at precisely 1 o'clock. We were bedecked in waterproof Yama Yama suits and on our luggage carrier we each had a trunk about as large as a fair-sized angel cake. On the starboard deck aft, we sported a blue-and-white Dayton pennant, and on the whole our mounts were quite impressive.

A "Loop-the-Loop" Performance.

Our first stop was Springfield, where we arrived at 1:55, after having "nearly beaten" a Wright aeroplane from Simm's Station to Fairfield. Mechanicsburg, our next stop, was reached in time to watch the sorrowful heavens

shed copious tears over the valley. After an hour's delay we chugged northward, and, on entering Marysville, I did a loop-the-loop on a freshly oiled street and landed on all fours on the front lawn of an old maid's home. Then I pushed my machine into the burg, where I borrowed a new wrench to straighten my crank-hanger. In doing so I put a dent in the jaw of the ding-busted tool, and when I showed it to the proprietor he made me pay a dime for the nick.

We ate supper at Caledonia, after which we took a fling at some night riding through the mud, in order to reach Galion as per our day's schedule. Never again! Between Martel and Galion, in inky blackness, we skidded over a five-mile stretch of the gluiest clay road it has ever been our misfortune to run up against. I have a distinct recollection of one particular spot where I did a glide almost into a cornfield, then a right-about-face for ten feet, finally countermarching and sitting down in the softest bunch of mire I have ever seen—or

at Strongville we found the fine brick pavement which extends all the way into Cleveland. We arrived in the Forest City at 2:47 p. m., and at 8:30 we boarded the *City of Erie* for Buffalo. Early the next morning we hunted up our steeds and found that during the night they had become seasick and had wallowed all over the saloon deck. Leo's machine had forgotten how to stand, while the fuel pipe line on my purrer was out of gear. After a little doctoring, we headed for Rochester, where we arrived at noon. About this time the heavens went in for an extended weeping spell, and we were compelled to take our restlessness out on the movies and the vaudevillians.

Geneva was reached the next morning at 10 o'clock, and here we were informed that a cyclone had just passed over that portion of the State. The president of the Ananias Club of that section greeted us, and his story of the pranks of the tornado was to the effect that it went out to Lake Seneca, on the outskirts of town, took a big hunk of water out of the center of it—and then put it right back in again. We canal-boated across Lake Cayuga and at noon slid into Syracuse. The scenery in this section of the State is scrumptuous and the roads are better than that. We dug through Utica and Herkimer, and at 5 o'clock, on entering Little Falls, we met two Cleveland speedsters with a twin Harley who had just made a too intimate acquaintance with a large stand-pipe. They informed us the road ahead was the worst ever, and we wisely decided to get up steam before venturing on. Suffice to say that we got through in good time.

The Arrival in Boston.

On reaching Palantine Bridge, the next morning, we found such fierce going that we hied ourselves to the New York Central Railroad tracks, which we rode almost into Fonda. It was on this stretch that my side kick, Leo, put on a little vaudeville spiel for the benefit of a bunch of yaps. We blew through Fonda, Amsterdam, Schenectady, and dined at Albany. The road and scenery through the Berkshires between Albany and Springfield beggars description. Time and again we stopped to feast our eyes, and it was with a pang of regret that we chugged on toward the coast. We reached the home of the Indian at 7 p. m., where we camped for the night.

"On to the sea" was the early morning cry, and we were soon whistling through the saucy city of Worcester and at 11 o'clock we blew in Commonwealth Avenue into the historic city



Elmer H. Gress.

felt. We reached Galion at 9:15, and after a splash in a two-by-six natatorium we were in dreamland in a jiffy. There is nothing like good sound sleep after a hard day on the road, bucking hills and sand.

After church the next morning we continued northward, passing through the beautiful towns of Mansfield, Ashland and Medina, and

of Boston. The champion Red Sox and the Senators were on the boards to mix things at Fenway Park that afternoon, and, being infected with baseballitis, we raved through nine stanzas watching our friend and fellow townsman, Clyde Engle, cavort around the initial pillow.



Leo Kramer.

The next morning we viewed Bunker Hill, Harvard and its stadium, retraced Paul Revere's epoch-making gallop, and at 2:45 left for Providence. On arriving at the Fall River Line docks we were rudely informed that our chuggers would have to be fenced up in order to be allowed to navigate with us. This necessitated the hiring of two wood butchers and the buying of a small size lumber yard, but after forking over half of our fortune our two-wheelers were allowed to bunk on the same boat with us while the latter migrated to the "City of Cities."

Doing the "Rube Act" in Gotham.

We did the rube act for several days up and down Broadway, and after saying "howdy" to Coney and Brighton Beach, we boarded the Weehawken ferry at noon on Monday, bound for Philadelphia. We reached the City of Brotherly Love at 6 p. m., and at sunrise the next day we headed our steeds toward Maryland. Lancaster was sighted at "elf uhr," and about the middle of the afternoon we rode through the picturesque battlefield of Gettysburg, which is promiscuously dotted with beautiful monuments and artistic tablets. After jogging over some rough and hilly country we rode into Hagerstown, where we stayed until the next afternoon as the guests of the writer's sister. Ladykiller Leo particularly enjoyed the ride from Philly on account of being greeted twenty-three times by pretty little lassies who gave us the glad hand and a winsome smile. We returned the smiles.

Riding the National Pike over the mountains from Hagerstown to Wheeling is like riding through a string of dilapidated stoneyards, but the beautiful scenery is a redeeming feature. At Romney, W. Va., in the heart of the fruit belt, we saw an orchard that was said to contain 90,000 peach trees and 12,000 apple trees. After being cross-questioned by a couple of reporters at "Stogieville," we crossed the Ohio

and chugged towards Zanesville in a misting rain. We left the home of the "Potters" the next morning, and just before reaching Circleville, Leo unwillingly chased five cows a mile and a half before they would allow him to set the pace. This seemed to get his engine's "goat," for three miles outside of Circleville his piston went bad. We procured a rope from a farmer, and just as we started the towing stunt a mule standing at the side of the road leaped out of his adornment and made a hasty getaway. Mr. Flying Merkel pulled Leo and his lame mount into Washington C. H., a distance of 23 miles, without hesitating. We continued on our homeward journey, and when within ten miles of Jamestown we unexpectedly tore into a stretch of loose rock, with the usual outcome when towing, of a scandalous spill for both. I did a jack-knife into a ditch to the right of the road, while Leo did a half-gainer into a cornfield on the opposite side.

Darkness overtook us and we gave the crippled chugger into the keeping of a farmer, and Kramer rode my luggage carrier into Dayton. We had enjoyed a fine 16 days' vacation and had some great experiences and barrels of fun, and were dee-lighted with the trip. Next year we will journey to—. Oh, well, that's another story.

SCHANTIN TO OPEN SHOP.

AS a result of his recent trip from Portland, Ore., to Portland, Me., Joseph P. Schantin, has contracted motorcycle fever and has decided to open a repair shop at 41 Grand Ave., Portland, Ore.

BOSCH VICTORS IN CANADA.

AT the recent race meet held by the Toronto Motorcycle Club, at Exhibition Park, Toronto, Bosch-equipped motorcycles won every event, while Bosch plugs were employed on two winners and three second-place machines.

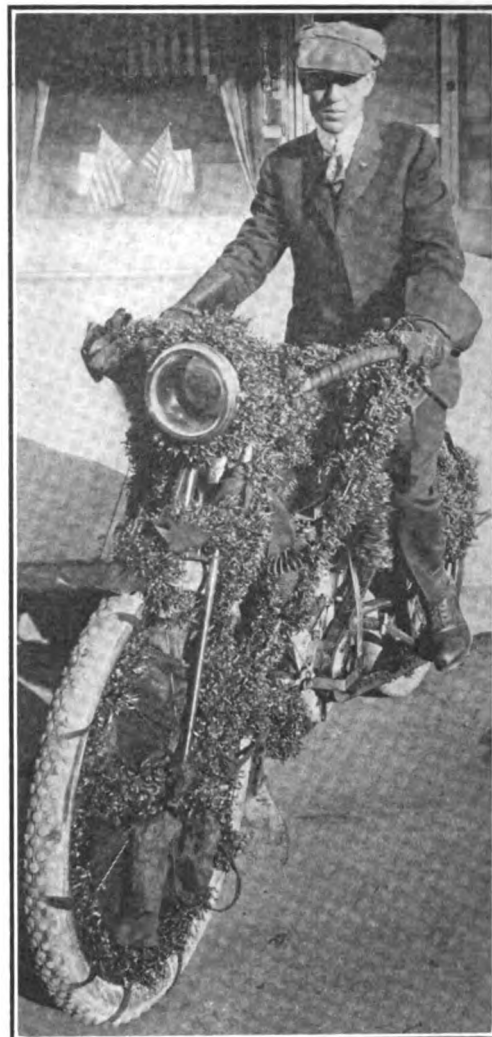
AN ELMIRA ENTHUSIAST.

MISS MARY POPECK, of Elmira, N. Y., has recently joined the ranks of motorcyclists in her city. She became interested in the sport through riding with her brother, L. E. Popeck, but prefers now to pilot the



machine alone. She has suggested that her brother should purchase a new twin and turn the single over to her. All of which goes to prove that she is a full-fledged enthusiast.

Eleven motorcycles are now being used by the Building Inspectors' Department, of Cleveland, Ohio.



Lawrence Miller, Manager of Tuileries Motor-drome in Denver, Mounting the Prize-Winning Merkel in Recent Mountain and Plain Festival.

SHORT GRASS RACE MEET.

PAUL WARNER, of Ellsworth, Kan., won the club cup in the recent races held at Pratt. The program was arranged by the Short Grass Club, and like all other events conducted by this organization, it was a huge success. Riders from all parts of the state participated, \$300 being offered in prizes by the club. No less than 2,500 fans were on hand. After the races the ladies of the club furnished an informal lunch, and the club's president, as well as other officials, addressed the crowd. Summaries of races:

Three-mile amateur—Cosand (Indian), first; Chitwood (Excelsior), second; Penrod (Harley-Davidson), third. Time, 4:39.

Three-mile professional—Good (Indian), first; Johnston (Wagner), second; Wilson (Harley-Davidson), third. Time, 3:52.

Five-mile amateur—Chitwood (Excelsior), first; Penrod (Harley-Davidson), second; Humble (Harley-Davidson), third. Time, 8:15½.

Four-mile professional—Good (Indian), first; Warner (Indian), second; Wilson (Harley-Davidson), third. Time, 5:07¼.

Ten-mile pursuit race—Warner, first; Good, second; Wilson, third. Time, 13:23.

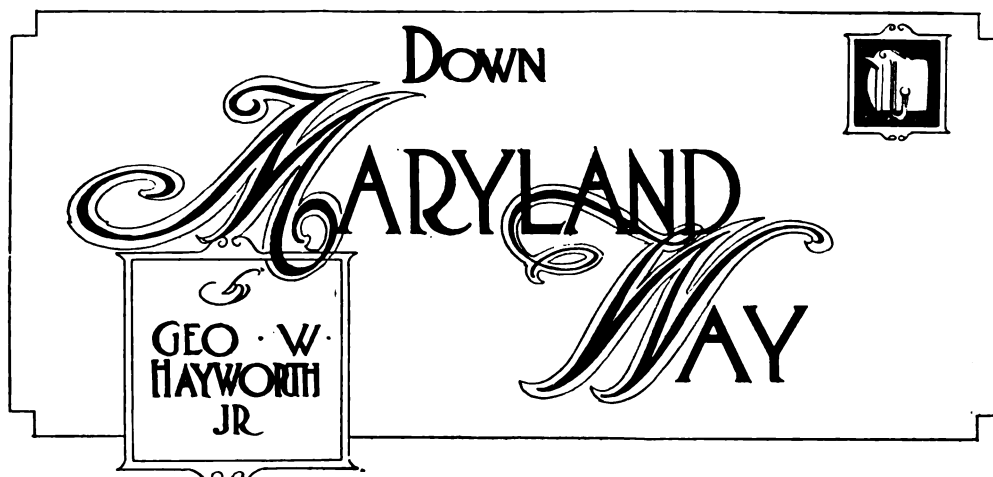
Five-mile amateur—Chitwood, first; Cole, second; Penrod, third. Time, 7:55.

Five-mile professional—Good, first; Wilson, second; Johnston, third. Time, 6:26¼.

Five-mile handicap—Warner, first; Good, second; Wilson, third. Time, 6:04.

One-mile against time—Warner won in 1:13½; Good, 1:15½; Wilson, 1:19½.

SIX motorcyclists of Medera, Cal., recently made a trip to Los Angeles to obtain boosting material for their home city.



As we had been looking forward to a motorcycle outing for some time we were glad when vacation time arrived, and our plans for a trip were soon completed. Stewart Price, my road partner, had relatives in Smithburg, Md., and as we wanted to travel in that direction, we decided to visit them. We started from Rutherford, N. J., in a heavy fog, but this did not last long and by 10 a. m. the sun was shining brightly. Neither of us had traveled

in Pennsylvania before so it was not remarkable that we should chose the worst route. Through Newark, Elizabeth, and down to Clinton the riding was very good, and it was not until we left the latter place that the roads began to give trouble.

The direct route to Reading, as we learned, was covered with loose stone, so that nothing remained but to go by way of Easton. This is anything but a good road; it led us over 14 miles of clay, with concealed rocks sprinkled throughout the entire distance. Just before reaching Easton I had a puncture in my rear tire, the only one of the trip. We soon left Easton behind, and the riding was fair from there to Allentown. We had expected to reach Reading that night, but I lost the nuts and spring off my magneto control and by the time we found a shop and were fixed up it was too late to continue. We left our machines at the shop of E. A. Hagenbuch, who showed us every consideration.

A Taste of Ignition Trouble.

As we were leaving Allentown Tuesday morning a native misdirected us and we found ourselves taking a roundabout way to Hamburg. The riding over this twenty-four mile stretch was simply awful; the so-called road could hardly be said to have a riding surface. On one of the worst hills Price's motor went dead, and thinking the trouble was caused by the grade we pushed to the top. On arriving there, however, no cheerful put-put greeted us. There was no spark, so we went over the wiring and it seemed O. K. On opening the battery case we found that the straw-board bottom to one of the cells had been left out, causing a bad short-circuit. At Hamburg new batteries were obtained, and they ended our ignition trouble. On our way to Harrisburg we passed through

beautiful farming country to Lebanon. En route, far up in the mountains, we passed a church that would have graced a city, and, strange to say, there were not more than a dozen houses as far as the eye could see. We soon struck the toll-pike, really a poor road, and when it comes to charging 22 cents to ride over it we feel it is rather rubbing it in. On our way to Harrisburg we passed Hershey, the home of the famous chocolate company. We reached Harrisburg about 4 p. m., and decided to remain overnight. We left our machines with the West End Electric Company, Indian agents, who filled our tanks and stored our machines free of charge.

Over Maryland Hills.

We were able to get some good pictures of the State House, also views along the Susquehanna River. Tandem riding is very popular in Pennsylvania's capital city at night. Leaving Harrisburg the next morning we paid



"At One Point Price's Motor Stalled."

two cents toll over the historic bridge. A heavy thunder storm overtook us at Carlisle, causing a short delay. From Carlisle to Chambersburg the macadam was in fair condition. On the Chambersburg Pike a toll was

again taken, 14 cents this time. Shortly after leaving Chambersburg we crossed the line into Maryland. Here the worst hills of the trip were encountered. Seven grades, all about fifty degees, were climber within three miles of riding. The course up the grades was little more than a trail. After about two hours of alternate pushing and riding we found ourselves at our destination, Smithburg, and we were glad of a chance to rest before undertaking the return trip.

KERR'S GOOD SHOWING.

FRED T. KERR, Emblem agent in London, Ont., and a well-known speedster, won four firsts, five seconds and three thirds out of thirteen races in which he competed during the past summer. In the remaining race Kerr was riding an Emblem single against a field of twins, and naturally failed to place. Kerr's friends regard this showing as quite remarkable when it is con-



sidered that the London dealer has found time to handle a thriving business and boom the motorcycle generally while carrying off his prizes.

THE NEW ORLEANS SQUAD.

NEW ORLEANS, La., is the latest city to "Indianize" its motorcycle police squad. Four of the 7 h. regular models have just gone into service. Before they were accepted by Superintendent of Police Reynolds, the machines were subjected to a strenuous speed test against a fast motor car on West End Speedway. Allowing the car a 300-foot start, the motor cops caught the flying four-wheeler in a little more than a mile, and immediately duplicated the feat over the reversed course. This demonstration convinced Superintendent Reynolds that nothing on wheels would get away from his men hereafter.

COSTELLO OPENS SHOP.

MIKE COSTELLO, well known as a pilot of Merkel racing machines in the metropolitan district, has opened a motorcycle headquarters with shop facilities at 86 Warburton avenue, Yonkers, N. Y. Costello has taken the Merkel agency for Westchester county, and is preparing to wage an active sales campaign with the opening of the 1913 season.

J. FRESE, of Spokane, Wash., with his wife and daughter in a side-car, is making a trip to Los Angeles on his seven Indian and will spend the winter there.

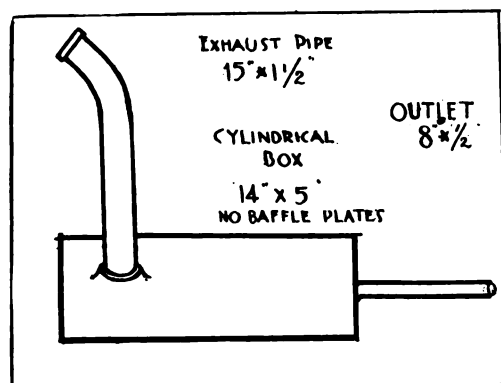
ENGLISH NOTES "BRITISHER"

Two More English Cyclecar Types; First Cyclecar Club Formed—Stanley Sets New Hour Record—Hub-bub Over Tires for 1913—Low's Novel Forced Induction Motor—Weatherproofing Machines.

I LITTLE thought when I forwarded a few timid paragraphs about cyclecars recently that this novel vehicle was going to knock spots off the whole trade for next season. The extent to which they are making good is shown by the fact that as I write a gathering of leading motorcyclists at the Holborn Restaurant are framing a Cyclecar Club, and that a leading firm of technical publishers have advertised a new journal entitled the *Cyclecar*, of which the first issue is dated for the eve of the Olympia Show. About 100 makers, small and great, are working like steam engines to get models ready for the autumn show and the spring sales.

The Rudge Cyclecar.

ONE of the most interesting cyclecars yet seen on the road is the Rudge, which is a genuine motorcycle, scaling only 4 cwt. in its experimental form, and capable of touching very near a mile a minute bat on a favorable road. It resembles nothing more than a giant's slipper, dropped on to a flat, low, spidery chassis, with the business portions of a motorbicycle stuck in its bows. Its final form will doubtless be prettier than the naked testing spider. It has a terrific appearance, when seen head-on, for the tubular frame is very narrow, and underslung in front, while the front wheels are widely splayed, so that the steering pivots, if produced, hit the ground where the front tires touch earth. Bang in



Standard muffler of British Auto Cycle Union, approved after exhaustive tests.

the fore-center of the frame is set a glorified edition of the standard, air-cooled $3\frac{1}{2}$ h. Rudge engine, but the piston stroke is no less than 132 mm., against the 85 mm. bore, and the power developed exceeds 8 h. on the dynamometer test. A multiple disc clutch is mounted on the crankshaft, and an enclosed belt takes the drive to a countershaft amidships.

THERE are large variable pulleys on the tips of the countershaft, controlled by a side lever, and affording ratios from 4 to 9 to 1. The back axle is a solid tube of high-grade steel, belt slip being relied upon to let the outside wheel overrun the inner when taking bends. The petrol tank of the experimental model is a disfigurement, for it consists of a swollen motorbike tank carried on struts above the engine, and its pointed front end does not soften its projections. Doubtless a better plan will be found for the final model. The dashboard comes close up to the raked steering wheel, and carries the oil pump, throttle, spark, and clutch controls, a valve lifter being the only lever on the wheel. Brakes consist of a pedal operating on the rear belt rims, and a side lever working extra shoes on the same rims. All four wheels are detachable and interchangeable, though the two wheels which carry belt rims would look odd on the front axle. Still, one spare wheel, provided with a belt rim would meet all emergencies. As the tires only measure $26 \times 2\frac{1}{2}$ inches repairs will be easy in any case. The rear springs are quarter elliptics.

The Humberette Cyclecar.

THE Humberette is a heavier, slower and more luxurious chassis, which follows the lines of a miniature automobile quite closely. It has an air-cooled V twin engine, set under a gauze-fronted bonnet; dimensions are 84 mm. x 90 mm. This chassis has a differential axle, shaft drive, and sliding gears, and is conventional in most of its details; in fact, it is just an ordinary two-seated automobile, as viewed through the wrong end of an opera glass. Its springing is unusual—an inverted, transverse quarter elliptic over the front axle, and quarter elliptics astern. Its chief novelty is a four-jet automatic carburetor (most of the cyclecars have automatic carburetors, with accelerator pedal control). It weighs 6 cwt., complete with cozy upholstered two-seat coach work, can do 35 m. p. h. and travel 50 miles on a gallon of gasoline, all in all, a very satisfactory showing.

New Hour Record.

G. E. STANLEY has set up a new hour record in the 500 cc. class on Brooklands track. He has a standard road racing two-valve Singer engine, 85 mm. x 88 mm., which can lap at 70 miles an hour for an hour without running hot. Unluckily for him he snapped an inlet valve spring in the last lap, and only just reached the tape, misfiring all over the place at about 8 m. p. h. In spite of this hoodoo and a standing start, he covered 67 miles 782 yards in the hour. Probably before the Show he will reel off a round 70, and there are one or two others who have a

bit up their sleeve. The great tip over this side is to send all the cracks out for the coveted records just before the Show, then the oil-stained machines are rushed up to town and put on the stand just as they finished. I enclose contours of the special racing cams fitted to roadster engines for these track sprints. Stanley is made of steel and india-rubber; he is one of the few men who can coil themselves into a bunch and sit for an hour on a palpitating lump of steel while it bumps over the rough cement at Brooklands, at breakneck speed.



Interesting English combination of seat and back-rest.

Heavier Tires Standard in 1913.

THERE has been a great outcry about the fitting of light tires in 1912. Competition has been fierce, and in the desire to keep prices low makers have continued to fit the same tires which were used ten years ago on low compression engines developing a bare $2\frac{3}{4}$ brake horsepower. These standard $26 \times 2\frac{1}{4}$ in. tires are listed at about nine dollars per cover, and on the back wheel of a modern efficient $3\frac{1}{2}$ h. machine, developing perhaps 7 brake horsepower, they did not average more than 1,000 miles. When they split or burst or wore flat, we usually fitted a much heavier type of cover, of the same dimensions, but embodying so much rubber that its price would be about thirteen dollars. The complaints grew so lurid that the tire makers compromised, and for next year they have brought out a new cover, with nominal dimensions of $26 \times 2\frac{3}{8}$ in., selling at eleven dollars; and the wide-awake motorcycle makers have decided to standardize this heavier and more costly cover.

The Choice of Tires.

AS an all-weather rider I find it essential to use a heavy and expensive cover, but when I have pulled my ten or twelve or fourteen dollars out ready for a purchase, I think twice. Many costly covers have such shallow corrugations on the tread, that although the cover may wear for 3,000, 4,000 or even 5,000 miles, it will cease to be efficient as a non-skid after 1,000. As a consequence, I invariably select tires which do not lose their anti-skidding properties until the tread is quite worn through. I favor two types. One

has deep sucker holes gouged out all round its line of contact with the road. One would fancy that punctures would occur frequently in these sucker holes, where the layer of rubber and canvas is at its thinnest, but in actual practice, I find this does not happen, and the only punctures sustained during the season were all caused by giant nails sticking in the thick of the tread. Apparently, if a nail catches in the sucker hole, the revolving tire presses it against the wall of the hole, and levers it out. The other type has a thick plain tread; but just wide of that part which rubs the floor, there are two sharp angular ridges; the instant the machine leans over for a skid, these ridges catch on the road and

jacket of an automobile engine. An eccentric on the camshaft drives a pump which feeds gasoline into this jacket, whereupon the heat of the cylinder flashes the volatile spirit into vapor, under very high pressure (due of course to sheer expansion). A transfer pipe takes this vapor to a rotary valve carried on the cylinder head. The valve action is as follows: an overhead inlet valve opens at the commencement of the induction stroke, and admits pure air to the cylinder, which is then compressed on the rise of the piston; as the piston reaches the dead center of its compression stroke, the rotary valve opens, and mingles the high pressure gasoline vapor with the compressed air, and a spark simultaneously

will be incapable of being "rained out," or proof against getting clogged up on a soft road so that the wheels will not go round. I mean we are gradually protecting every tiny part against mud and dust, so that a machine can be hosed down to clean it, and go just as well when wringing wet, as when it is dry and bright and new. This ideal is embodied out of a host of details. First of all, the ignition has to be absolutely encased. The switch is discarded, and aluminum plates, guarded by oiled paper washers, protect every joint on the magneto. The solitary wire that from the high tension brush to the sparking plug, emerges from a similar aluminum plate, through a waxed stuffing gland, has a fibre encased terminal at the plug, and finds its plug guarded by a vulcanite "umbrella." Nickel-plating is gradually being abolished. Nuts are finished in black oxidation; the usual plated parts are either stove-enamelled black, or covered with a thin skin of black celluloid varnish, by a secret process. Bearings are waterproofed by a dozen different methods. A popular device is to guard the edges of a ball bearing by an upturned flange, which shoots off water, tight fit and grease stuffing being superadded inside.

Open Mufflers Prohibited.

IN view of the government prohibition of the open muffler, the Auto-Cycle Union is taking immediate steps to publish the principles of efficient muffler design, and a public trial of different patents will be held early in December. A "standard" muffler has been constructed, as the result of tests with representative engines, and in the trial this muffler will rank as the canon of judgment, no device which permits more noise than the standard being accepted. The standard consists of an exhaust pipe of $1\frac{1}{2}$ in. bore, 15 in. in length, leading the gases to a plain cylindrical muffler, 14 in. long by 5 in. in diameter, and devoid of baffle plates; the final emission is by a pipe of one-half in. bore and 8 in. long. It is not suggested that the perfect muffler should follow this design or incorporate these dimensions. The prize will go to that design which is not less silent than the standard, and permits the highest technical efficiency compatible with silence.

Novel Forced Induction Engine.

DR. Low has now perfected a design for a forced induction engine, which will be of immediate interest to racing men, for it enables as much as 18 h. to be obtained from a cylinder capacity of 500 cc., which under old designs seldom allowed more than 8 brake horsepower to be developed from such a cubical limit. The main feature of the engine is that its cylinder is surrounded by a gasoline jacket, resembling the watercooling

occurring (via magneto), a terrific explosion results. The exhaust valve is normal in every respect. The lubrication is forced, by a mechanical pump, which oils the rotary vapor valve, as well as a piston trough and the main bearings. Muffling and cooling and lubrication are the main problems of maintaining the efficiency of such an engine, though metallurgical problems, including the gas-tight surfaces of the rotary valve and bearing pressures, are of course no child's play.

Weatherproofing.

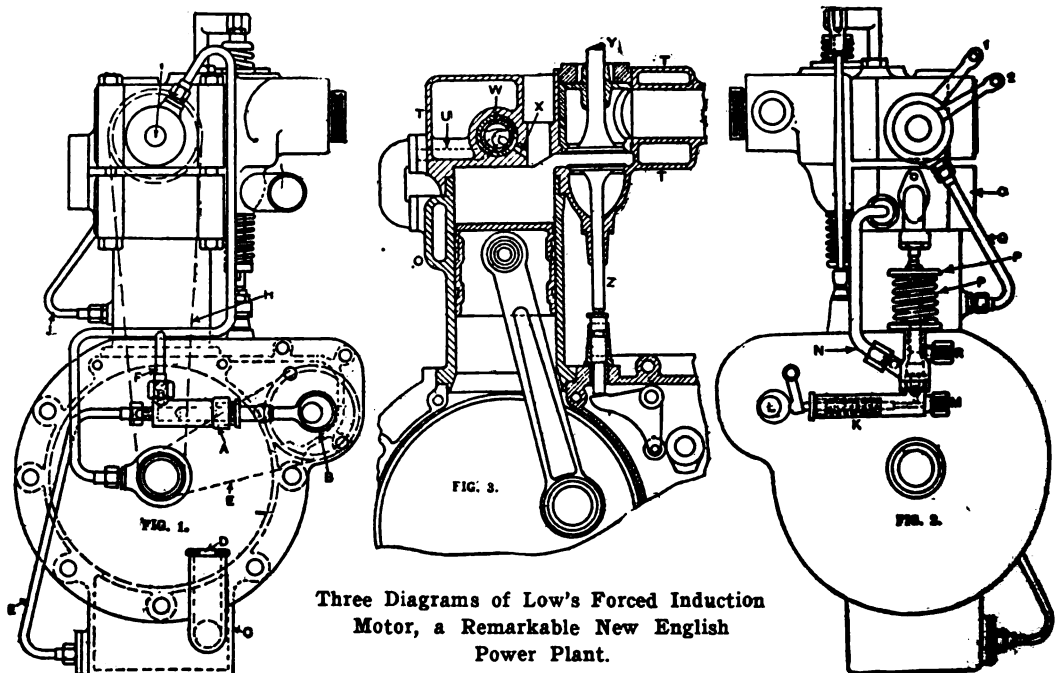
ONE of the top notes of our Show will be the weatherproof machine. By that I do not mean simply that the 1913 machines

FORCED INDUCTION MOTOR.

Fig. 1.—A, oil pump; B, oil pump eccentric; C, oil sump; D, oil filler; E, oil pump driving chain; F, oil delivery pipe; H, rotary distributing valve driving chain; I, rotary distributing valve; J, oil return pipe.

Fig. 2.—K, gasoline pump; L, pump eccentric; M, union for gasoline pipe from tank; N, gasoline pipe; O, gasoline jacket; P, spring controlling gasoline vapor valve; Q, vapor pipe; R, bypass.

Fig. 3.—T, water jacket; U, transfer passage; V, transfer pipe; W, rotary admission valve; X, transfer port; Y, M.O. air admission valve; Z, M.O. exhaust valve; 1 and 2, levers controlling rotating sleeve, operated by Bowden wire.



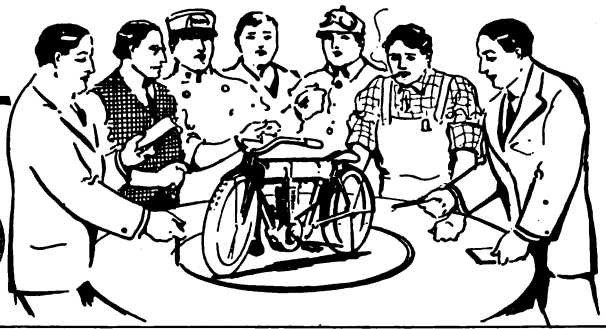
MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.

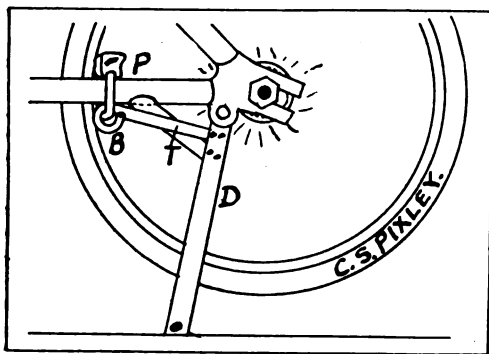
6. The prize winners will be determined on the point system as outlined above by the editors of MOTORCYCLE ILLUSTRATED who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.

7. At least one dollar will be paid for every suggestion published.

8. Competitors are requested to address all their communications to Editor Improvement Contest, MOTORCYCLE ILLUSTRATED, 51 Chambers street, New York City.

THIEF-PROOF DEVICE.

TO prevent stealing of the machine, an attachment capable of being fitted to any stand is here shown. The stand D has riveted to it a piece T having a closed scroll B at its end, this scroll fitting snugly against the stay when the stand is down. A long shackled padlock P is fastened through the loop of the scroll and over the stay, preventing the machine from being wheeled away or driven off under its own power. Contributed by C. S. Pixley, Sacramento, Cal.



CELLULOID WINDSHIELD.

A CELLULOID windshield should be provided to protect the face and upper part of the body. It is fitted to three up-rights attached to the handle-bars, with the celluloid on the front or outside of the bracing. Contributed by Carl J. Heath, Andover, Mass.

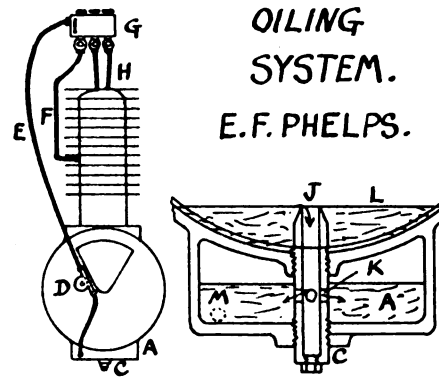
ON an 850-mile tandem trip through Maine and New Hampshire, Mr. and Mrs. Ralph Jones, of Bridgewater, Me., received only one puncture.

CLOSING DATE

COMPETITORS in the Motorcycle Improvement Contest, and prospective contributors should note that the last improvement suggestions will be received for publication in the issue of December 26, and that the announcement of prize winners will be made in the following issue, that of January 9. Communications and drawings, to be eligible for consideration, must be in this office not later than December 20, so that they may be judged with the final suggestions to be published in the December 26 number.

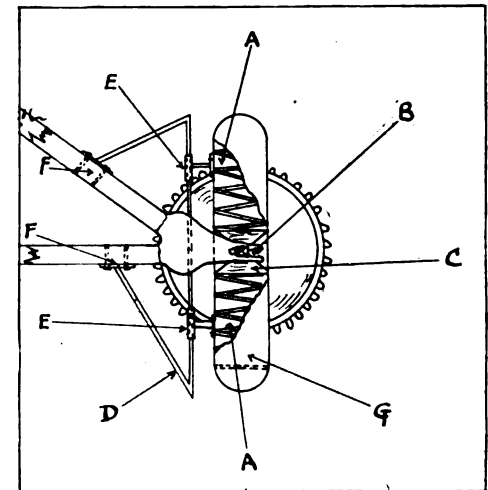
OILING SYSTEM.

E. F. PHELPS.



TO insure positive oiling of the motor bearings, piston, and rod ends, a combination pump and sight-feed system is here shown

as satisfactory. The crankcase of the motor has fitted to it a pump or well A, from which is drawn oil by a pump D, operated by the motor. A lead E from D goes to a rack of three feeds G, each feed being fitted with sight-glasses. Lead F goes to the rear of the cylinder, and oils the piston, while leads H are for the main bearings. Within the sump is a stand-pipe J projecting into the crankcase and regulating the height of the oil therein into which the flywheels dip. This stand-pipe is provided with a hollow and ports K give communication with the interior of the sump. L is the oil-level in the crankcase and M the outlet to the pump D. A drain plug is fitted to J at C. Contributed by E. F. Phelps, Bridgeport, Conn.

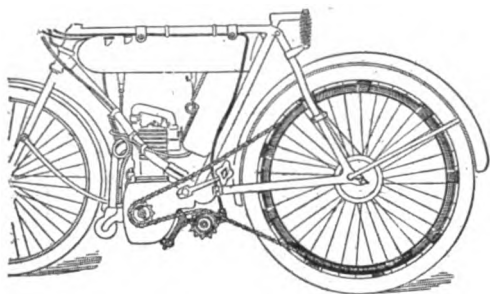


A SHOCK-ABSORBER to fit any motorcycle is here shown. The tube G is fastened to the rear axle, and the bolt B, fitted

to the rear fork, is part of the double cone C. This cone C plays vertically on two stiff coil-springs A, A, which take up the road shocks. G is kept from revolving with the rear wheel by means of slides E, E, working on triangled rods D. These rods are fastened to the frame at F, F. Contributed by G. P. Rodgers, Pittsburgh, Pa.

A RADICAL CHAIN DRIVE.

SOMEWHAT startling ideas are involved in a new transmission system for motorcycles now being tested by a French inventor. He utilizes a chain throughout for driving, but combines the principles of both belt and chain drives by leading the



chain over the large rear pulley after the manner of an ordinary belt. By substituting sprocket wheels for the driving and tension pulleys, the slipping to which belts are subject, is of course eliminated, while the large pulley on the drive wheel remains the same as on a standard belt-drive machine, except that its groove is lined with special leather. Over this pulley the drive is by friction as would be the case with the ordinary belt, and the usual slipping operation is resorted to when the jockey sprocket is relaxed. Obviously, this entails quite heavy wear on the chain, and particularly on the rear pulley facing, and the practical value of the system may be seriously questioned.

Several years ago the makers of the French Alcyon machine fitted a similar transmission system on a type of light horsepower—1¼ horsepower or thereabouts—but this drive is not used on any of the company's present models. The drawing herewith is reproduced from a recent issue of *Popular Mechanics*.

SPIEGEL PENNANTS.

WHILE manufacturers are putting the finishing touches on new motorcycle models and equipment specialties for the 1913 season the Spiegel Art Co., of 111 Broadway, Brooklyn, N. Y., is also making a special effort to keep abreast of developments by beautifying its line of motorcycle pennants. This firm has been supplying the bulk of the pennants used by Eastern riders, and it is now preparing to handle its business on a much larger scale. The company announces that it offers no commissions, owing to the small margin of profit counted upon, and that its dealings are direct with agents. Full information relative to rates and the scope of the company's pennant line will be forwarded upon application.

IN the recent elimination run of the La Porte (Ind.) M. C., to Chicago and return, six out of the eight starters finished the run with perfect scores.

WARD WINS DERBY RACE.

ABOUT 500 enthusiastic newsboys were the guests of the management at the second meet at the Los Angeles stadium on Sunday, October 27. Considering the adverse weather conditions a big crowd attended the meet and race followers were rewarded by close and exciting finishes. Wold, though not a first prize winner gave several thrills by his high riding during the Angel City Derby. In the fourth race Rognon, the Salt Lake rider, was leading by half a lap in the last mile, when his chain broke, putting him out of the winning class.

The Angel City Derby, in which fifteen riders were entered, was won by Ward. It was easily the best race of the day, being run in three heats of a mile each. The final heat proved to be a neck to neck affair, with Ward, Humiston and Fleckstein riding almost abreast to the finish. In this event Wold made a game fight. Getting a bad start he was left almost half a lap behind, but he closed the gap and was just behind the leaders at the finish.

A NOVEL LAMP BRACKET.

ONE of the most interesting developments of late in connection with a motorcycle lighting system is involved in an improved bracket which is to be marketed by Gilnett & Henry, 366 Seventeenth street, Astoria, Ore. This bracket is fitted with springs and works on a swivel plan in such a way that the light projection in turning a corner is on a sharper angle than that taken by the front wheel. In other words, the light "beats the wheel around the corner," and thus enables the rider to observe objects in the line of his turn more quickly than with a light whose rays are thrown directly ahead in a line with the wheel. It will be noted in the photograph that the lamp is turned considerably off the line of the front wheel. When the wheel is



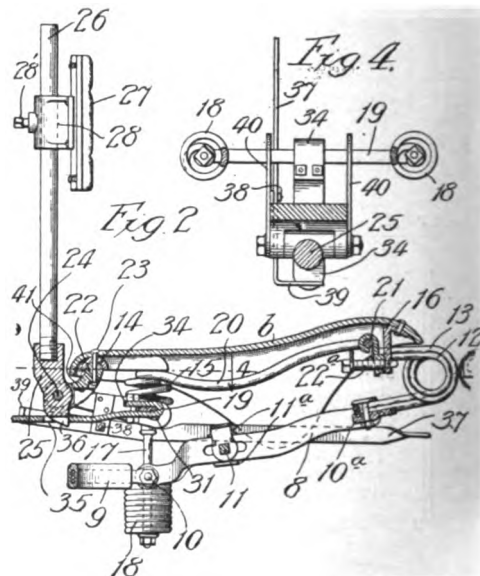
straightened, the lamp of course assumes its normal position and the light is thrown straight ahead.

SALT LAKE CLUB'S RUN.

ABOUT fifty members of the newly organized motorcycle club of Salt Lake City, Utah, recently held a run to Garfield.

BACK-REST AND SEAT.

WILLIAM H. HOWARD, of Chicago, is the inventor of the motorcycle back-rest described below. It aims to provide a sturdy rest for the rider when such a convenience is needed, and may also be lowered in such a way that it forms an extra saddle for the transportation of a tandem passenger. The rest may be lowered at the will of the rider while the machine is in motion so that it does not interfere with mounting or dismounting. A bracket 22 is secured to the



back of the saddle 14 by the rivets 23, and this bracket extends downward rearwardly from the backpiece and serves to carry a pivot bolt 24 for a lug 25. A post is screw-threaded into the lug so that it adjustably sustains the back-rest. The latter has secured to it a bracket through which the post 26 extends, and a clamping bolt holds the bracket and the back-rest in the desired position on the post.

The front of the back-rest is upholstered, and by adjusting the rest vertically on the post the rider may place it in the most comfortable position. When it is desired to use the back-rest as an extra saddle the post is lowered about its pivot 24. A forked brace provides a firm support for the rear end of the post 26 when the rest is being used as a saddle. This brace is adapted to straddle the rear wheel and has a seat 30 for the post, formed on its upper end, and its lower ends are bifurcated to engage the rear axle. When the brace is not in use it may be held against the rear forks of the motorcycle frame.

For the purpose of manipulating the back-rest or lowering it when the rider is about to dismount a lever is placed beneath the seat, easily accessible to the operator. It is possible to either raise or lower the back-rest while the rider is in the saddle by simply using this lever.

COLUMBUS, Ohio.—P. I. Haynes, of the firm of P. I. Haynes & Co., central Ohio distributor for the Harley-Davidson, reports unusual interest in the single-cylinder model.

THIRTY motorcyclists of Savannah have signed a letter requesting President-elect Woodrow Wilson to use them as an escort on March 4 during the inauguration ceremonies.

QUESTIONS and ANSWERS

REGARDING the replies to Question No. 8, explaining the action of a three-port, two-stroke motor, the really interesting ones were relatively few, but all showed thorough knowledge of the action of such a motor. The awards had to be made, consequently, in favor of those who employed the fewest words in describing the action of this form of two-stroke motor. Those which are here published can be read to great advantage by all motorcyclists, as the three-port motor is the best type of the two-stroke class.

The first prize in this contest is awarded to W. H. Ogle, of 1110 Third street, Moundsville, West Virginia. To Herman Ferns, of 94 Adelaide street, Winnipeg, Manitoba, is awarded the second prize. Honorable mention has been given the answer submitted by L. J. Egelberg, of La Crosse, Wis.

The series of contests now being conducted in this department will close with the issue of December 26, and announcement of the final winners will be made in the next issue, that of January 9. Contributors should submit answers to each question as soon as possible after its first appearance so that the work of judging and awarding prizes may be facilitated. All answers, and communications referring to the contests, should be addressed to: "Editor Questions and Answers, Motorcycle Illustrated, 51 Chambers street, New York."

Below are given question No. 9, that for which answers are now being received, and the new question, No. 10. Prize winners for No. 9 will be announced in the next issue.

Question No. 9. Which is the most desirable location for the clutch on a belt-driven machine?

Question No. 10. Which is the better method of fitting valves, grinding or truing?

FRANK

MERRITT

ACTION OF TWO-STROKE MOTOR.

(Question No. 8.)

IN this contest the first prize is awarded to W. H. Ogle, of Moundsville, W. Va., whose contribution is as follows:

"The three-port, two-stroke motor operates thus: Assuming the piston is at the end of the stroke next the crankcase (outward dead center), the exhaust port for the passage of the burnt charge from the cylinder is uncovered by the piston as is also the transfer port in the cylinder-wall. This port communicates with the crankcase by a passage generally cast integral with the cylinder, known as the by-pass. The crankshaft having been revolved toward its present position, there will be a slightly compressed charge of air and gas within the crankcase. The charge rushes through the by-pass and transfer port to the cylinder and on entering it strikes a deflector on the piston head on the side nearest the transfer port. This deflector directs the charge upward to the cylinder head.

"The incoming charge helps force out the exhaust which remains from the preceding working stroke, through the exhaust port. The piston now moves upward and compresses the charge, which is ignited at or before the upper dead-center. As the piston rises, it uncovers a third port, which establishes communication between the carbureter and the crankcase. The piston, moving upward, creates a vacuum in the crankcase and a charge rushes into the

latter from the carbureter. When the piston descends on the working stroke, the third port is first closed, then the exhaust port is uncovered (near the end of the stroke) and finally the transfer port, as mentioned above. The cycle of operations is gone through in two strokes: (a) working, exhaust and crankcase-compression on the down-stroke; (b) admission, and cylinder-compression on the up-stroke."

Winner of Second Prize.

The second prize is awarded to Herman Ferns, of Winnipeg, Manitoba. His answer follows:

"In a two-stroke motor, there is an explosion in the combustion chamber at every revolution of the crankshaft. Engines of this type are of two classes: Three-port and two-port, according to the number of ports in the cylinder-wall. In the three-port engine the piston acts as a valve, there being no special valves as in other types of motor. The position of the ports is such that when the piston is at its extreme upward position the port leading from the carbureter is open; when the piston is at its lowest position the other two ports are open. These ports are: that which allows the charge to pass from the crankcase to the cylinder and that which lets the burnt charge out of the cylinder. The latter is the exhaust port and is opposite to that port which allows the charge to enter the cylinder.

"It will be noted that these ports are opened only at the extreme outward and

inward position of the piston; between these positions they are covered by the piston. When the latter starts from its lowest center and a charge is in the cylinder, the exhaust and intake ports are successively closed and the mixture or charge is compressed. A partial vacuum is formed in the crankcase by the upward movement of the piston and the new charge rushes in from the carbureter, the crankcase being air-tight. When the charge in the cylinder is ignited, the piston descends, first closing the intake port from the carbureter and compressing the charge in the crankcase. When the piston reaches the lowest position, the exhaust port is uncovered and the burnt charge passes out. The compressed charge from the crankcase passes through the passage into the cylinder, the piston moves upward and the cycle of operations is again repeated. A deflector is fitted to the head of the piston directly in front of the port from the crankcase. This turns the incoming charge upwards and this new charge assists in expelling the burnt charge through the exhaust port."

Honorable mention is given to the answer of L. G. Egelberg, of La Crosse, Wis., which is as follows:

"The two-stroke cycle engine, more commonly known as the two-cycle or the two-stroke engine, receives a power stroke or impulse for every revolution of the crankshaft. In other words every other stroke is a power producing stroke. This engine has no valves opening into the clearance space, as are found in four-cycle engines.

"In the three-port type we have, as the name implies, three ports or openings into the cylinders; the exhaust port connecting with the exhaust pipe, the inlet port communicating with the carbureter, and the transfer port which joins a transfer passage leading to the crankcase.

"The ports are placed in the cylinder walls as follows: On one side we have the exhaust port, and directly opposite it the transfer port, both being placed so as to come immediately above the upper edge of the piston when the latter is at the bottom of the power stroke. Below the exhaust port we find the inlet port, so placed that it lies directly beneath the lower edge of the piston when the latter is at the top of the compression stroke.

"The action of this type of engine is as follows: When the piston moves upward the space beneath it will be increased, causing a suction in the crankcase, but as the latter is made airtight, nothing can get in until the piston reaches the top of the stroke. Here the piston uncovers the inlet port and through it air enters the crank case with a rush, picking up gasoline on its way through the carbureter.

"At the same time a mixture, previously supplied, is being compressed and exploded above the piston. As the sudden expansion of the gas drives the piston downwards on the power stroke it cuts off the intake port and compresses the mixture in the crankcase. As the piston reaches the end of the power stroke it uncovers the exhaust port, releasing the burned gas into the exhaust pipe, and an instant later uncovers the transfer port, blowing the compressed crankcase charge into the cylinder and at the same time forcing the remaining burned gas out through the exhaust.

"A deflector is generally provided for turning the incoming charge upwards, and so preventing it from mixing with the burned gas, to a greater or less extent. As the piston rises it cuts off the exhaust and transfer ports and compresses the fresh charge into the clearance space above, ignition taking place near the top of the stroke. Meanwhile the rise of the piston is drawing a fresh mixture into the crankcase, preparatory to its being transferred to the cylinder and exploded on the next power stroke, as described above. This series of operations is repeated as long as the engine runs."

MERITS OF MACHINES.

S. R. DE TURCK.—We cannot choose a machine for you from among the list submitted, as it is against our principles to make comparisons between the different makes of motorcycle. Even if we were partial to one or more makes, we would take a chance on not suiting you in recommending any machine, and all we would get out of it would be hard words. Get the various catalogues, and look over them, or better, if this is possible, communicate with some rider (not a racer but a road-rider) with experience on the motorcycles mentioned. In other words, ask the men that own them. The fact that a machine is "knocked" in one or more localities is nothing to its discredit. Certain neighborhoods are devotees of one machine and cannot see the virtues of any other make. The widely varying road conditions in different localities also influenced riders' opinions. So the "one best bet" is to remain neutral.

LONG STROKE MOTORS.

P. KIVIATT.—Your definition of a long-stroke motor is perfectly correct, and only the 5 h. twin mentioned can be considered as approaching that class. The reasons which have deterred motorcycle manufacturers from building true long-stroke motors are various. One is the limited overhead space between the tank and lower frame members. Another is the adherence of motor designers in general to various empiric formulas for horsepower, such as the S. A. E. and the A. L. A. M., both considering the bore as the chief factor. The latter formula is:

$$\frac{D^2 N}{2.5}$$

D being the diameter of the cylinder or the bore, and N the number of cylinders. This formula is only applicable for piston speeds up to 1,000 feet per minute. With a motor of $3\frac{1}{2}$ inch bore and $3\frac{3}{4}$ inch stroke, greater than 1,000 feet can rarely be got, and the formula is fairly accurate. With a motor of $2\frac{3}{4}$ inch bore and 5 inch stroke, according to this formula, the power would be 3, but the actual power developed at 2,400 r. p. m. would be 5.7 and the piston speed, 2,000 feet per minute.

The various classes, according to internal combustion engineering authorities are de-

rived from the bore-stroke ratio. Thus: long stroke, 1:1.66 and greater; medium stroke, 1:1.3 to 1:1.66; short stroke, 1:1 to 1:1.3; and "square," 1:1. There is no official name given to motors with stroke less than the bore, but we use the term "big bore" to indicate such ratios. The 1911 and 1912 Merkel motors are of this latter class.

TIGHTENING SPOKES.

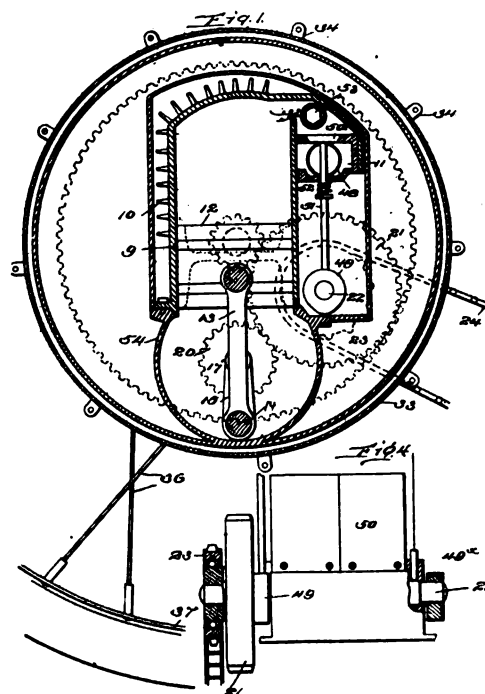
B. KUHN.—With the spokes all set in place but loose, proceed as follows: Tighten with the nipple-wrench one spoke on the right and then the one opposite across the axis of the hub (on the left). Do the same with another spoke on each side of the hub, and so on. Verify the alignment of the wheel from time to time. Do not set down wrench-tight, but only half-tight; then when all are so tightened, measure the wheel from hub center to rim at several points for truth. Now tighten down all the spokes and measure again. Finally, spin the wheel on the axle. Use the ordinary nipple-wrench only, and do not employ too much force.

TWO-SPEED GEAR.

HANS ROBYN.—A two-speed gear such as you desire is the N. S. U., handled in this country by the Sun Motor and Supply Co., 307 Amsterdam Ave., New York City. The price is in the neighborhood of \$45.

AN AUTOWHEEL.

WITH a view of providing an attachment from which power may be obtained for the propulsion of an ordinary bicycle, Arthur C. Siebak, of San Francisco, Cal., has designed the motor-wheel shown in the accompanying illustration. The motor-wheel consists of a circular main



Siebak Motor-Wheel.

casing or chamber from one side of which projects an arm 2 that is connected to the lower frame bar of the cycle by a clip. There is one of these arms on each side of the main chamber. Within this chamber is

a cylindrical casing, divided into two parts, the first containing oil and the last gasoline. A circular extension fitted with two shoulders is provided and the cylinder of the motor is bolted to these shoulders.

The cylinder is fitted with a piston and connecting-rod and the latter is attached to a crank 17 carrying a pinion 20 meshing with a gear 21 on a shaft 22. This shaft 22 also carries a sprocket 23 and chain 24 which leads to the cycle pedal shaft. The magneto for ignition is driven from gear 21 which is mounted in extension of the armature shaft. Gear 21 meshes with an internal gear attached to the cycle-wheel and drives the latter by means of this internal gear.

SCHONACKER RESIGNS.

A. G. SCHONACKER has resigned as general manager of the Marvel Carburetor Co., of Flint, Mich., the condition of his health demanding that he locate in the West. Mr. Schonacker joined the Marvel company when its products were little known, and during his period of service he has seen the firm develop to the point where its next season's output is practically sold out.

ON BLACK HAWK STAFF.

ARCHIE McCULLOM, for some time connected with the New Era Auto-Cycle Company, recently accepted a position with the Black Hawk Motorcycle Company, of Rock Island, Ill., as designer and consulting engineer. He was tendered a farewell dinner at the Algonquin Hotel on the evening of his departure by the Dayton Motorcycle Club.

COLUMBUS, Ohio.—**L. P. Birkenbach**, central Ohio distributor for the Thor, will leave soon on a trip which will take him into every county of his territory. He will cover all of the southern counties of the Ohio River and many of the northern counties.

TIPS *And* TOPICS



WITH the season of mud and slushy roads almost at hand, the all-year motorcyclist is confronted once more by the problem of avoiding undue rust on his mount, and of carrying it through the winter in such condition that it will be fit for continued service in the spring. In this emergency there are several valuable wrinkles easy of adaptation. For example, a common-sense treatment with ordinary vaseline will reduce rust trouble to the minimum; it is best applied with a soft paint brush, and should be used quite liberally. Hubs, spokes and wheel rims should be given a coating, all nickelplating may be treated similarly and even the frame will benefit by an application of the grease. Fork and saddle springs, often entirely overlooked, should receive liberal doses of vaseline, as they are very susceptible to rust and none too easy to get at once the harm has been done. If these precautions are taken, the task of cleaning the machine after a hard ride over winter roads will be materially lightened.

RIDERS who lay up their machines for the winter should remove the tires, wash them with soap and water and then dry them carefully. They should next be wrapped in strips of paper or cloth and stored in a dark place, where the temperature is kept as nearly as possible at 50 degrees. Burlap sacks for enclosing the stored tires will afford additional protection. The wheel rims should be freed from rust and then coated with vaseline until they are to be used again. If the tires are to remain on the rims, jack up both front and rear wheels and leave about five pounds

of air in each tire. A simple stand for the front wheel may be devised by using pieces of board with a notch cut for the axle nut on either side, and with a cross-piece at the bottom connecting the two boards and acting as a base.

I WAS studying the phenomena of side-slip or skidding, as it is more often called, the other day when driving in the rain with a sidecar. The outfit was going over macadam roads, much treated with tarvia or some such preparation, and the camber of the roads was high. With the chair on the right-hand side, on making a left turn, the skid was considerable, almost amounting to a turn around facing the other way, but with a right turn there was practically no side movement. Braking only accentuated the skid, and this showed the need of brakes on the sidecar wheel as well as on the motorcycle rear wheel. My advice is, do your braking long before you reach the turn, and *roll* around the corners, correcting any skidding tendency with the handlebars by turning the wheel toward the side the skid shows signs of occurring on; this particularly on wet, high-cambered roads.

IT is often a seemingly obvious little mechanical wrinkle that helps a rider or a repairman out of a tight place, and the knack of acquiring such wrinkles is one worthy of cultivation. In this connection a Massachusetts motorcyclist refers to a tip which he picked up recently for keeping a level surface on a part which requires the use of a flat file. He points out

the tendency of the operator to give his file a downward twist at the end of each stroke, and states that a small mirror, placed just back of the vise in which the part is being held, will enable the file user to sight along the tool and thus keep it on an even keel, so to speak.

ONE student of gasoline engines states that he sometimes finds a puzzling leak in the intake pipe or carburetor connections by filling a common oil can with gasoline and squirting the liquid around the joints, with the engine throttled down. When the leak is reached and the outside application of gasoline is made the motor will pick up speed perceptibly and repairs may then be made.

WIRE controls sometimes develop cranky turns in mudlarking that would never reach a critical stage in ordinary summer roading, and the thoughtful rider will save annoyance and expense by using powdered graphite mixed with vaseline as a lubricant for the inner wire. Experienced motorcyclists have found this an excellent mixture, and have learned that it may also be used to good effect for valve guides and other parts.

JOHAN P. HOOPER, of Trenton, N. J., suggests that if three or four small stones are placed in a motorcycle muffler and allowed to bounce about while the motor is operated, much of the carbon that may have been accumulated will be loosened from the muffler walls and blown out with the exhaust gases.

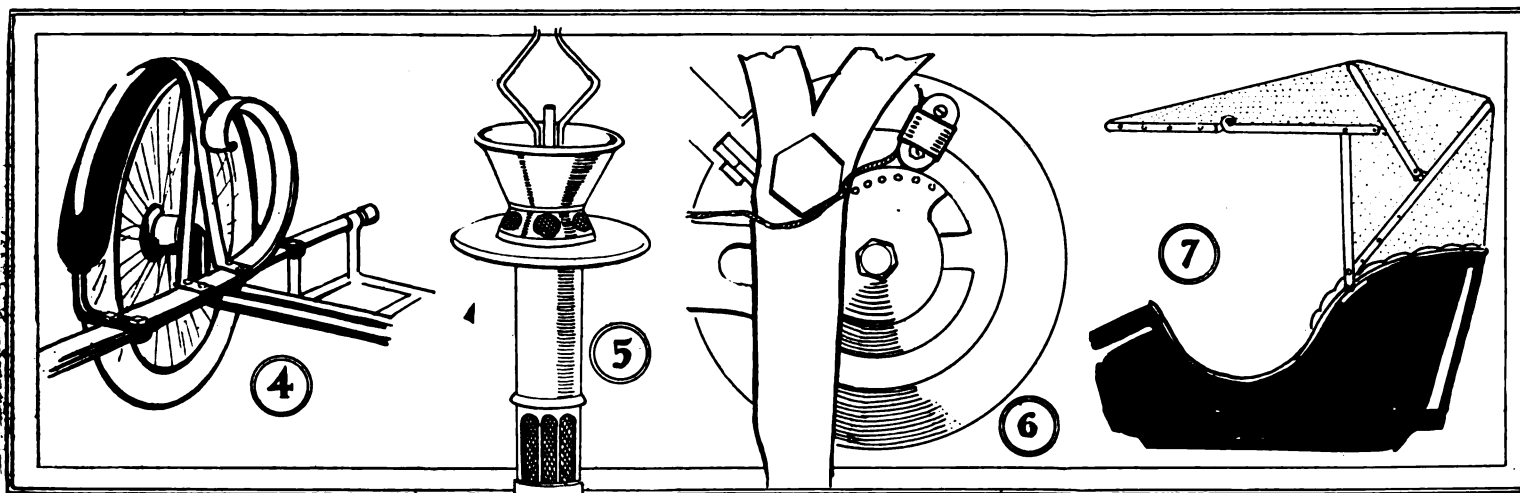
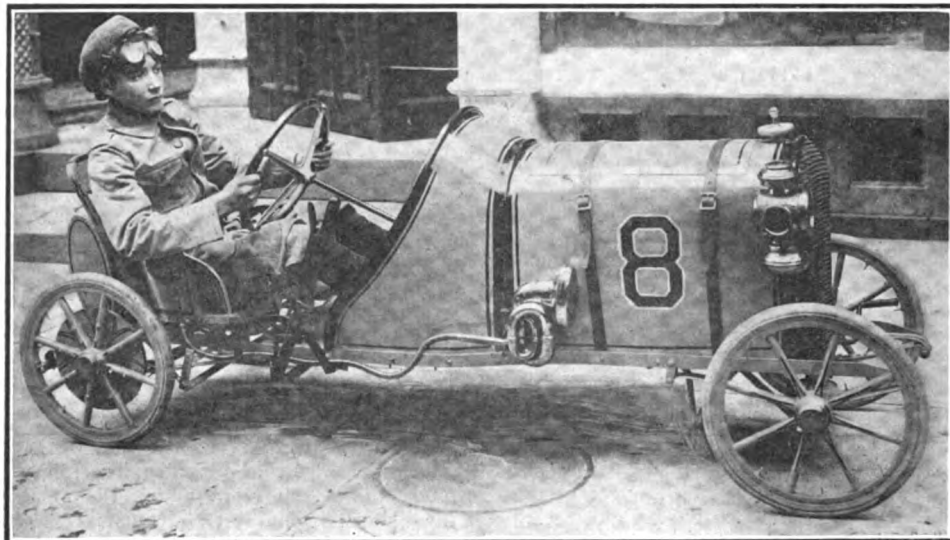


Figure No. 4 shows a distinctive English frame with special trussing and mudguard fastening; figure 5 is a combination funnel and filter, recently placed on the market; figure 6 shows a device which cuts out the magneto when the brake is applied, and figure 7 is a new type of English sidecar top. It is noted that many recent English inventions relate to sidecars, particularly to the springing and trussing.

IS THIS FIRST AMERICAN CYCLECAR?



DURING all the hub-bub over English types of cyclecars—those ingenious first cousins to the motorcycle—there has been no indication of activity along similar lines by manufacturers in the United States, and for that reason special interest attaches to the accompanying photograph, showing what is probably the closest American approach to the British cyclecar types. The picture was unearthed in Philadelphia, Pa., by Arthur LaRoe, Indian agent in Perth Amboy, N. J., who in addition to being an accomplished roadster is a keen student of motor developments. LaRoe states that the novel little vehicle was built by William Pinaud, of Philadelphia, who uses a 2-cylinder, 2-cycle, water-cooled motor of the Lloyd type to drive it. The motor generates 12 h. p., is fitted with a mixing valve instead of a carbureter and drives by direct shaft and bevel gears to a

jackshaft, from which the power is transmitted to the rear wheels by a double flat belt system. There is a foot-operated service brake on the jackshaft, and emergency brakes on the rear wheels. Springing is by semi-elliptics in front and three-quarter elliptic springs in the rear; steering is by a fifth-wheel as shown. The machine has a wheel-base of 66 inches and a tread of 28 inches, 18-inch wheels being used.

Two seats are fitted, and not long ago Mr. Pinaud and a boy passenger made a run to Atlantic City, N. J., averaging about 22 m. p. h. While the construction of the Philadelphia machine is distinctive, almost throughout, it strongly suggests some of the lighter types of cyclecars now being poured into the British market, and for this reason its discovery by the New Jersey agent should be of interest to motorcycling in general.

"SHORTY" A YALE MAN.

TOLEDO, O., November 4.—A new man on the Yale traveling force is "Shorty" Matthews, the rider who has started at so many dirt track meets in Illinois and neighboring States during recent years. He has



quit the racing game and will give his attention entirely to business. He will probably ride a Yale in the big endurance runs next season and perhaps in a few hill climbing contests. Just now he is on a trip that

will cover Illinois, Iowa and Missouri, and on the route he promises to keep the factory busy filling contracts.

WITH WELDING COMPANY.

FRANK DEWITT, formerly connected with the Columbus Bolt Works, Columbus, O., will succeed Grover C. Thompson as representative for the Electric Welding Products Co., of Cleveland, his territory being Ohio and Indiana. Mr. Thompson is now on the staff of the Michigan Electric Welding Co., of Detroit.

FREEMAN IS SALES MANAGER.

F. D. FREEMAN, formerly retail sales manager for the Aurora Automatic Machinery Company, and later connected with H. T. Roberts in Chicago, has severed his business relations with the latter to take up the duties of sales manager for the Excelsior Cycle Company.

LIMA, Ohio.—Williams, "The Motorcycle Man," located at 301 West Erie street, has closed a contract to represent the Indian in that territory for 1913.

A. HOLOFCENER, who recently opened a store in Baltimore, has taken the agency for the Yale in Baltimore and vicinity.

IMPROVED J-D PLUG.

AFTER exhaustive tests and consultations with leading motorcycle engineers, the Jeffery-Dewitt Spark Plug Company, of Detroit, has produced a porcelain motorcycle spark plug which promises to meet a steadily increasing demand among motorcycle riders. The new plug is a distinct type—as distinct as the other leaders of the Jeffery-Dewitt line, the Reliance and J-D—and it promises to take the place of the widely used mica plugs, by reason of its longer life and better service.

The shell or base is a little over half the length of the ordinary shell, and is so designed that it protrudes into the cylinder exactly the right distance for the best results. The bushing is so designed that the upper shoulder of the porcelain sits far into it, allowing a higher seat of a shallower base than could ordinarily be used. This permits the use of a porcelain with a heavy shoulder and with length enough below the shoulder to insure the proper insulating surface, thus giving the plug several unique and valuable features. The terminal nut is designed to take ordinary wire or a ring slip, or special Indian terminal.

The porcelain for this new motorcycle Standard Spark Plug is the product of the Jeffery-Dewitt potteries, renowned for heat-defying qualities.

FROM A TRENTON ENTHUSIAST.

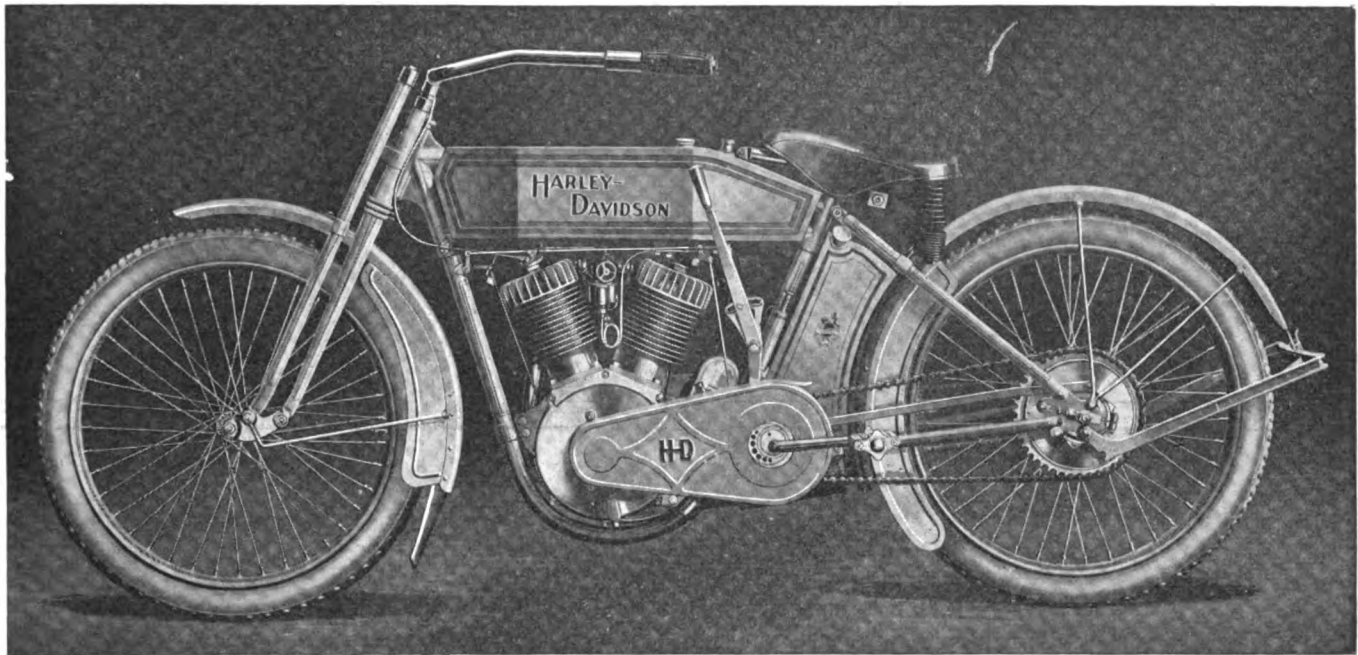
GEORGE B. YARD, of Trenton, N. J., thinks he has a record for troubleless riding on his Emblem. Writes George: "My 1911 twin has carried me through two



seasons without a penny spent for repairs. Bent a pedal several times, but aside from that I have had no trouble whatsoever. I have ridden about 10,000 miles and have ground in the valves only once. The engine has never been taken down."

"BOSCH—OF COURSE."

THAT the Bosch magneto was retained on Indian machines for 1913 would no doubt be taken for granted, regardless of announcements, but this does not account for the failure to specify the Bosch in the article dealing with new Indian models in the October 31 issue. The magneto specification was omitted inadvertently, the article simply stating that the ignition would be the same as last year.



The Greatest Harley-Davidson Eight Honest Horsepower

THE Harley-Davidson twin is instantaneously responsive to the throttle—off like a flash—picks up quickly—no faltering hesitation—no sluggishness—no snorting or popping.

It does not have to be babied, nursed or coaxed into action—it's *all there*. It's a real downright pleasure to handle one.

And it starts easily. The great bugbear of many twins is their hard starting. No use trying to dodge the fact. Everyone knows they *do* start hard.

You don't have to prime the cylinders of a Harley-Davidson, even in cold weather. In fact, there's no primer on it and never was. The twin Harley-Davidson motor turns over like it should—easier than most singles—not like a twenty ton winch.

Correct design (and this includes proper balance of all moving parts), good material and the very highest grade workmanship obtainable have long since established the Harley-Davidson as the most satisfactory motorcycle.

All Harley-Davidsons incorporate the patented Ful-Floteing Seat and Free Wheel Control—both exclusive features.

Harley-Davidson Motor Company

306 C Street

Milwaukee, Wis.

Producers of high grade Motorcycles for eleven years



OPENED MANSFIELD QUARTERS.

AN account of a storm a small attendance marked the opening of the new club-rooms of the Mansfield (Ohio) Motorcycle Club but the program did not lack enthusiasm. The club was organized a year ago last August with nineteen charter members. Since that time the membership has increased to 55, and a creditable sum is stowed away in the bank. This money has been gathered by the club from various race meets. The Mansfield club is said to be one of the liveliest clubs in its section of the state and it is doing much to advance the sport. Race meets, sociability runs and endurance runs have been held regularly. The accompanying photo shows the members who figured in the opening of the new rooms.

ARUN to Louisville over a 300-mile course was recently held by the members of the Indianapolis (Ind.) M. C. Out of twelve starters five had perfect scores.

UNIQUE PRAIRIE SCHOONER.

ONE of the most distinctive features of the recent Short Grass tour was the Velie "Prairie Schooner" which accompanied the tourists and carried the baggage. The accompanying photograph shows this machine, popularly known as the "Velie Number 4," it being the fourth automobile turned out by the Velie factory. It was the first Velie 40, and the first touring car of its type to appear in Kansas City. It has seen constant service for several years, and according to records has covered 50,000 miles. Before the Short Grass tour the touring body was removed and it was equipped as shown in the picture, the equipment in itself making quite a load. This car, although carrying a load of 2,200 pounds of baggage, came through the ordeal with practically a perfect score and at one time it carried 18 men in addition to the regular baggage. The total expense of the car on this trip, for running and repairs, was just \$1.80. Goodyear tires were used. On its arrival in Kansas City, without being repaired in any way, it was turned over to the largest department store in the city and is now being used by them for delivery purposes.

A MERKEL WINNER.

AT the third annual race meet of the Lancaster (Pa.) Motorcycle Club, Harry C. Becker, of Reading, riding a single cylinder, ported Merkel, lowered the track record from 1:16 to 1:09. The former record was made three years ago and since that time numerous attempts to break it have been unsuccessful.

LOUISVILLE AGENTS.

RAY BROS. will sell the Yale for 1913, in Louisville, Ky., and in some territory in Kentucky and southern Indiana. The 1913 contracts were signed up at the factory in Toledo a few days ago by C. A. Ray.

The firm is going to wage a strong campaign for next year and plans are laid for extensive newspaper advertising.

PLANs for forming a motorcycle club in Delaware, Ohio, are materializing and the riders hope to have an active organization long before the 1913 season opens.

LONG REPLIES TO COCHRANE.

EDITOR MOTORCYCLE ILLUSTRATED:

Following up my recent argument with reference to the Bennings Labor Day meet, I wish you would print the following: While I do not approve of "chewing the rag," I wish to make an exception in this case by answering Mr. George T. Cochrane, president of the Washington Motorcycle Club, relative to his article in *MOTORCYCLE ILLUSTRATED*, issue of October 3, under the heading "Bennings Situation." Mr. Cochrane says "the track was in perfect condition." I wish to ask him what caused Mr. Marsh to burn up a machine that day? Answer: he could not hold it in the sand and pump oil at the same time. Why did another rider go two miles and then quit? Answer: "too much sand."

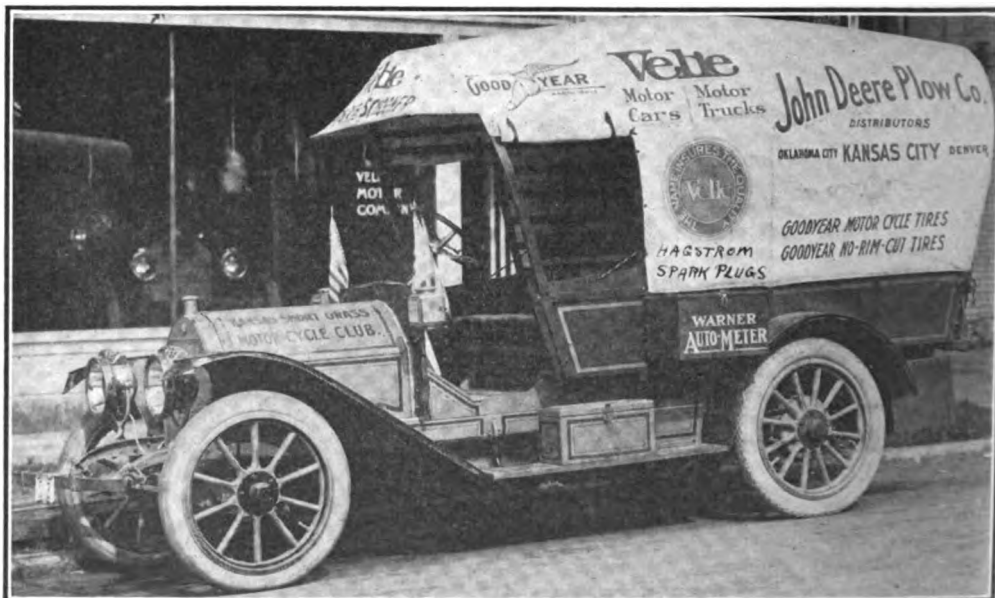
If the track was in perfect condition, why was there special need of oil? Mr. Mangold, who won the two races, sent two postal cards to the meetings of the racing men, which were held on the Thursday and Monday preceding Labor Day. These postals were read, passed around and later filed. They are now available as evidence.

Mr. Cochrane is partly correct regarding the novice question, where Messrs. Mangold and Marsh are concerned, but the others were really novices. Mr. Meyers' first race on the track was on May 13, this year, and he had not been on again prior to the Labor Day meet. Mr. Cochrane is wrong when he says Mr. Mangold is the best rider in the District of Columbia, as Tommy Dedge (holder of the championship here for the past three years) has beaten Mangold out in every race he was entered.

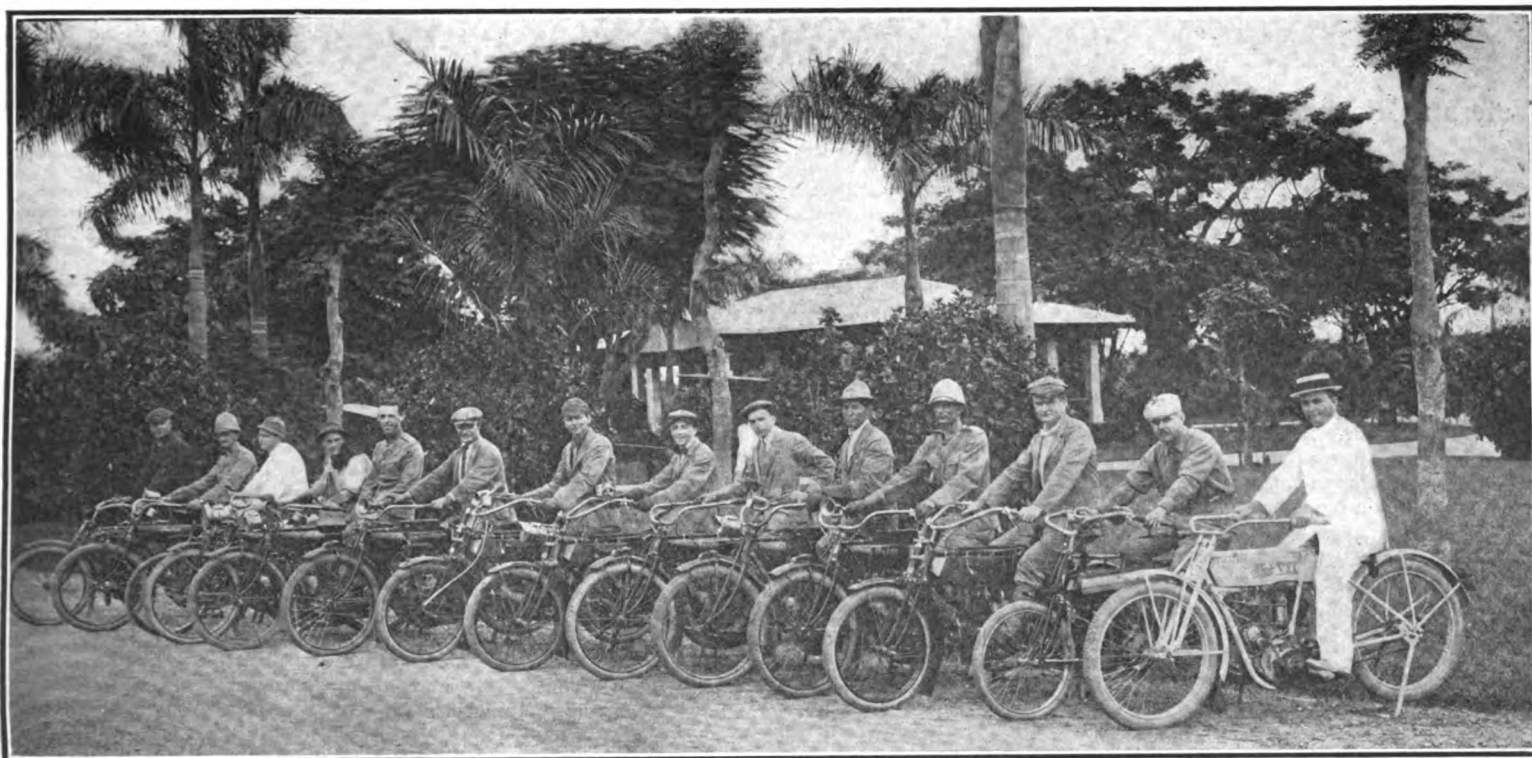
The races on Labor Day were not satisfactory from the spectators' standpoint. I refer Mr. Cochrane to the *Post*, *Herald*, *Times* or *Star*. They said the races were unsatisfactory. The prize money, as stated lately from the promoters, was as follows: First race—first prize, \$15; second prize, \$10; second race—first prize, \$25; second prize, \$15, as against the figures of Mr. Cochrane.

FRANK LONG.

Washington, D. C.



Twentieth Century "Prairie Schooner" that Attracted Much Attention During Recent Tour of Kansas Short Grass Club.



FROM THE PHILIPPINES.

THEODORE SIDDALL, secretary of the Luzon Motorcycle Club, of Manila, P. I., forwards the accompanying photograph of some of the club members who

participated in a recent outing. From left to right they are: Squires, president; Phillips (two visitors), Gavagan, Walker, Grodske, Case (two more visitors), Albright, Siddall, Gasser and Kelly. The pic-

ture shows about one-third of the club's membership. Secretary Siddall reports that many of the roads afford fair going in clear weather, and that steps are being taken to improve the best-known routes.

A RUN TO JOPLIN.

MEMBERS of the Springfield (Mo.) M. C. recently participated in a run to Joplin. The distance is 100 miles each way and was covered in four hours.

NEW USE FOR THE SIDECAR.

SIDECARS have been generally considered as pleasure vehicles exclusively, but the Department of Water Supply, Gas and Electricity of New York City has discovered an interesting and practical field in which this type of attachment has wide usefulness. After careful investigation the department has ordered a Majestic sidecar for the use of one of its engineers whose duties lie in the Long Island district, and it is believed that the car will prove a valuable acquisition, as it will enable the engineer and his assistant to cover their field rapidly and attend to duties in widely separated localities.

CHANGED HIS MIND.

SOME time ago C. L. Scrivens, of the Scrivens Motor Car Company, of Ashtabula, Ohio, announced that he was desirous of withdrawing from the motor field and he held to this opinion until he paid a visit to the Harley-Davidson factory recently. While at the plant Scrivens talked the matter over, examined the new H-D models and then decided to stick to his headquarters in Ashtabula. He will handle the Harley-Davidson machines in his district.

MEMBERS of the Freeport (Ill.) Motorcycle Club recently participated in a 98-mile jaunt through Forreston, Polo and Dixon to Sterling and back by way of Forreston.

DES MOINES M. C. SMOKER.

MANY forms of amusement and entertainment were offered those attending a recent smoker of the Des Moines (Iowa) M. C., and the members broke records for enjoyment.

A PLAN is being advanced by motorcycle riders in Perth Amboy, N. J., to form a local organization and affiliate with the F. A. M.

AT a recent meeting of fifty motorcyclists of Piqua, Ohio, the Harley-Davidson Motorcycle Club was organized. Officers were elected and arrangements were made to secure permanent quarters.

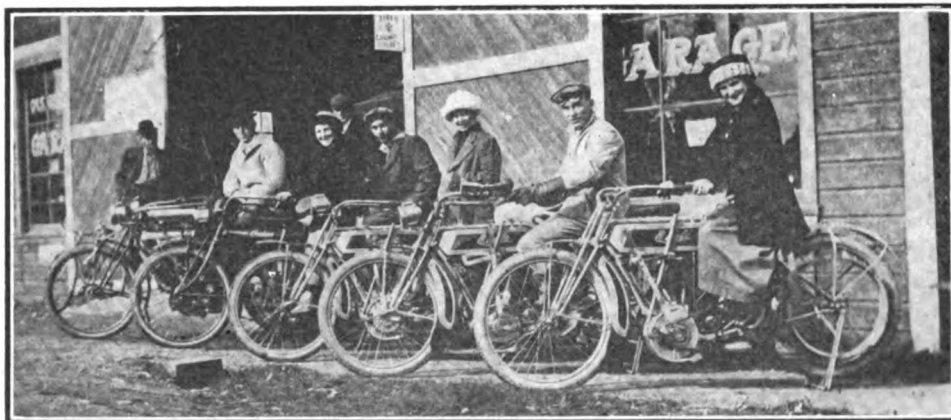
FORT WAYNE DANCE.

A DANCE recently given by the Fort Wayne (Ind.) M. C. was heartily supported by the members and no less than 224 couples took part in the grand march. Eighteen prizes were awarded.

DATE FOR HERRING RUN.

THE annual Herring Run, which marks the opening of the touring season of the Providence (R. I.) Motorcycle Club will be held Sunday, April 28, to Taunton, Mass.

OTTO NICHOLS has been elected president of the newly-organized motorcycle club of Reedley, Cal., with Lloyd Wicks, vice-president, and Charles M. Knauer, secretary.



A NORTHWEST BOOMER.

IN the accompanying photograph appears a squad of riders snapped at the motorcycle garage of Axel Kildahl, in Lents, Ore., a sub-

urb of Portland. Kildahl handled a big business in M. M. models throughout his district for 1912, and has placed an order for Eagle machines to round out his line for the coming season.

MORE TIPS ON MOTORCYCLE LIGHTING

Veteran Rider Points Out Vital Importance of an Efficient Illuminating System and Gives Some Generator Data—Information Gleaned From Widely Varied Lamp Experiences

By GEORGE M. JOHNSON

A GOOD lighting system is really as essential for a motorcycle as for its big brother, the automobile, since there are probably few riders who never use their mounts after the shades have been pulled down. If a motorcycle is to give its owner perfect satisfaction, not only must it deliver the goods itself, but its equipment must be high grade in every particular. In this connection a first-class lighting system is something that will quickly prove its worth. How many four-wheelers that you see about the country depend on generators to supply the gas for their headlights. They are quite rare, and when you do find a man whose car is generator equipped, he is usually on the point of changing to tank service, or else he never expects to use his machine after dark. Here is one place where motorcycle riders could profitably follow the autoists' example.

Of course, there are some generators that render satisfactory service; personally I have never seen or heard of one, yet a few doubtless exist somewhere. But in the main a generator has more natural, out-and-out cussedness concealed within its harmless-looking exterior than a whole squad of army mules. Only lately two friends of mine took a five-hundred-mile jaunt, and one was giving me some details of their trip. His headlight is supplied by Presto tank; the other chap depends upon a generator. Incidentally he remarked that they did quite a bid of night riding.

"How did your lights work?" I asked. "Have any trouble with 'em?"

The tourist laughed.

"I didn't," he rejoined, "but every single time Partner tried to light up, there was something out of whack with that blessed generator of his."

Some Generator Tips

I personally have known several generators, and every last one of them gave trouble, varying in degree from a light that was unsteady and flickering, to one which failed utterly when I was miles from home on the darkest night of the year. I never had any satisfactory night use of my motorcycle until I discarded all generators and put a tank on the machine. This is not a paid ad. for any tank company, but a simple statement of fact from my own experience. The first point, then, which I wish to emphasize, if you would keep your lighting system at its highest efficiency, is the consignment of that generator to the scrap. Some generators need very careful nursing and they are rarely worth the trouble.

But there are a few facts it is well to remember if you persist in using a generator, for you may be one of those who stick to them. Most important of all, clean it after every using, even though it was in operation only a short time. I once made a carbide sifter by pounding a number of holes through the cover of a cocoa tin. When cleaning or recharging the generator, I would simply pour its contents into my sifter, put on the cover and shake, in that way easily separating the used carbide from what was still good.

If your generator is one of the screw to-

gether variety, don't fasten it up to tightly. I did that more than once, and had a sweet time getting it apart again. If it does stick, you can usually start the threads by fastening the perverse thing in a vice, then gripping the free end with both hands.

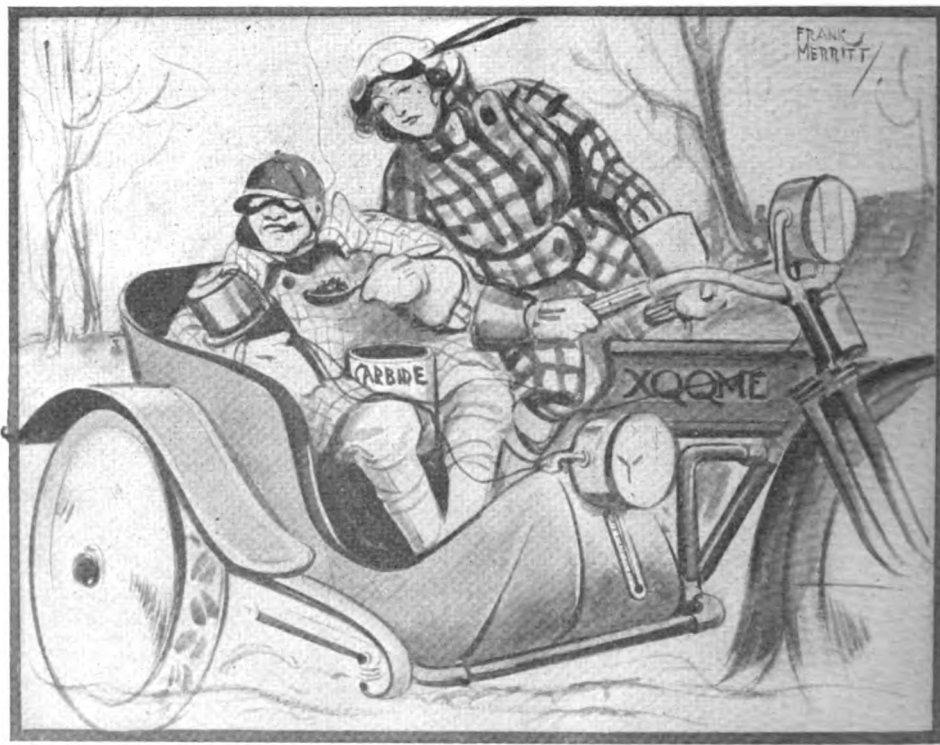
Danger with Small Lamp

Some riders are out after dark so rarely that they employ merely a bicycle lamp, which gives light enough for city use. Once or twice I have seen these small lamps fastened to the fork of a machine, within the radius of the front wheel. That is an exceedingly dangerous arrangement, and should never be resorted to. I tried it one time on a push bike, before I graduated to the motorcycle class, and received proof of the danger involved. The clamp jarred loose, letting the lamp swing down between the spokes of the front wheel as it revolved, and you can easily imagine the result. Half the spokes were ripped out of the rim, and the fork was badly sprung, while I described a graceful curve over the handle bars, ploughing up a fair amount of macadam road with my body. The

A good auto or motorcycle searchlight does this. If a machine is traveling at all rapidly, a bicycle lamp will not light up far enough ahead to make it safe for the rider. In other words, before he can see an obstruction, he will be too close to it to stop, whereas the typical headlight will enable him to spot a lightless vehicle a long distance away.

Fitting the Tank

There are three common ways in vogue of attaching a gas tank to a motorcycle; on the top bar above the gasoline tank, across the handlebars, and on the luggage carrier. The main objection against the first two methods is that the tank is likely to sag over to one side or the other; its weight, combined with the jolting of rough roads, is a big strain for the none too heavy clamps provided. These last, in turn, are sure to mar the enamel or nickel plating unless a liberal wrapping of tire tape is first applied. If the tank is very far from the headlight, one should use copper tubing rather than rubber, for the latter goes to pieces very quickly, especially when bent into a circle. Have the copper tubing extend as



"Some Generators Need Very Careful Nursing."

possibilities of such an accident are increased a hundredfold if the vehicle is power driven; the lamp will be far more likely to be jolted loose, and the results would probably be quite serious.

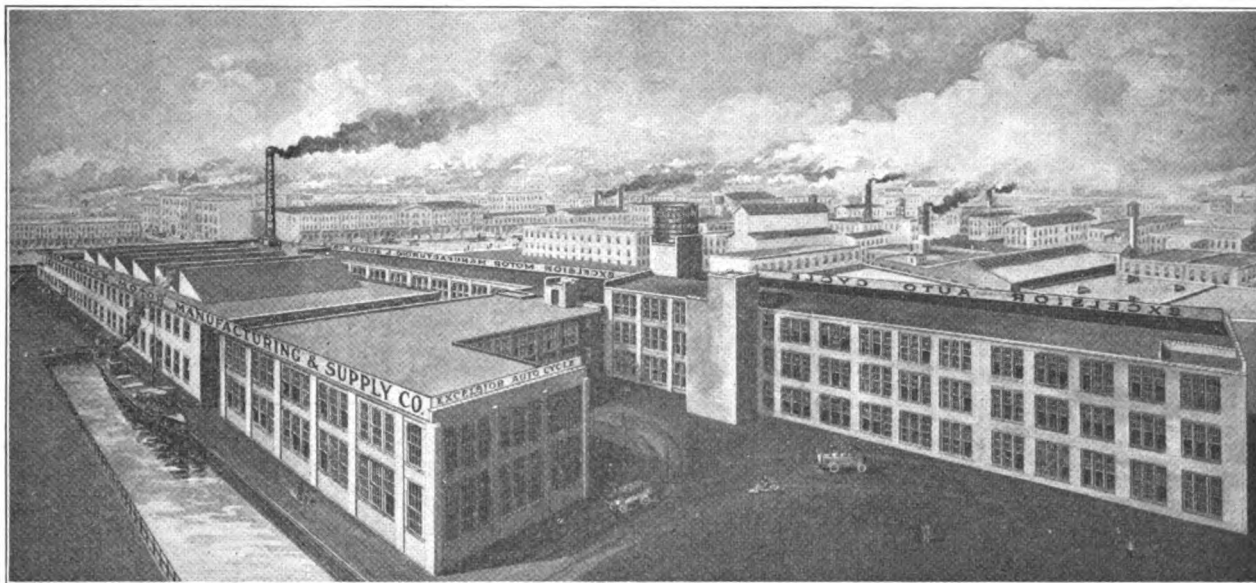
Using a bicycle lamp on a motorcycle is dangerous from another standpoint, whenever the machine is ridden out into the open country. A bicycle lamp lights up the ground for a few feet ahead very brightly, but it is not so constructed as to send a long, narrow tongue of light down the road before the machine.

close to where the connections are to be made as is possible, so that only short lengths of rubber tubing need be used to join the copper to your tank and light.

In making connections, put two turns of tire tape about all the metal ends, and moisten this with gasoline to make the rubber tubing slip on easily. If the whole length of rubber connection is then carefully wrapped with tire tape, it will last indefinitely; if unprotected in this way, the rubber will probably require renewing at more or less frequent intervals.

The Excelsior Has Always Made Good

Announcement of 1913 Models



HOME OF THE EXCELSIOR

Excelsior Motor Mfg. & Supply Co.

Office and Factory, 22nd and Union Streets, Chicago

For 1913 Better Than Ever

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

The Excelsior Has Always Made Good

Mechanical Changes

The Excelsior catalog tells the story in detail of the 1913 improvements. There's nothing drastic, nothing sensational, nothing outlandish. All made possible because we haven't sacrificed our good mechanical sense. But there are many improvements that make for ease of control, readiness with which parts can be reached, etc. More than ever will the Excelsior be the strong, swift and sensible machine.

Speed

The Excelsior racing records have been made with our regular motors. Not special motors made just for the track, mind you,—but our stock motors. Let that sink in, please. The 1913 "7" actually develops 10 horse power. That's the kind of a motor you want.

Economy

The Excelsior has it on all when it comes to economy. Why, it's a regular "tightwad." Mr. R. P. Miller of Chicago in a sworn statement says that he covered 119 and a fraction miles on one gallon of gasoline on an Excelsior 7 Twin. Only another instance of Excelsior value! This remarkable power has been developed without increasing the piston displacement. The 1913 Excelsior is the most powerful 7 h. p. motorcycle motor ever built.

AND NOW TO GET DOWN TO ACTION

Fill in the coupon now. Get it in the mail today, or copy it on a postal card. Anyway, get your request to us today

DEALERS' COUPON

EXCELSIOR MOTOR MFG. & SUPPLY CO.,
22d and Union Streets, Chicago

I would like your advance 1913 literature.
I would like to know if you have a satisfactory agent in this territory.
I now handle the.....
I can sell (Number of Machines) yearly.
Name
Address
City and State.....

RIDERS' COUPON

EXCELSIOR MOTOR MFG. & SUPPLY CO.,
22d and Union Streets, Chicago

I would like to know all about the 1913 Excelsior.
Please send me your literature.
Name
Street
City and State.....

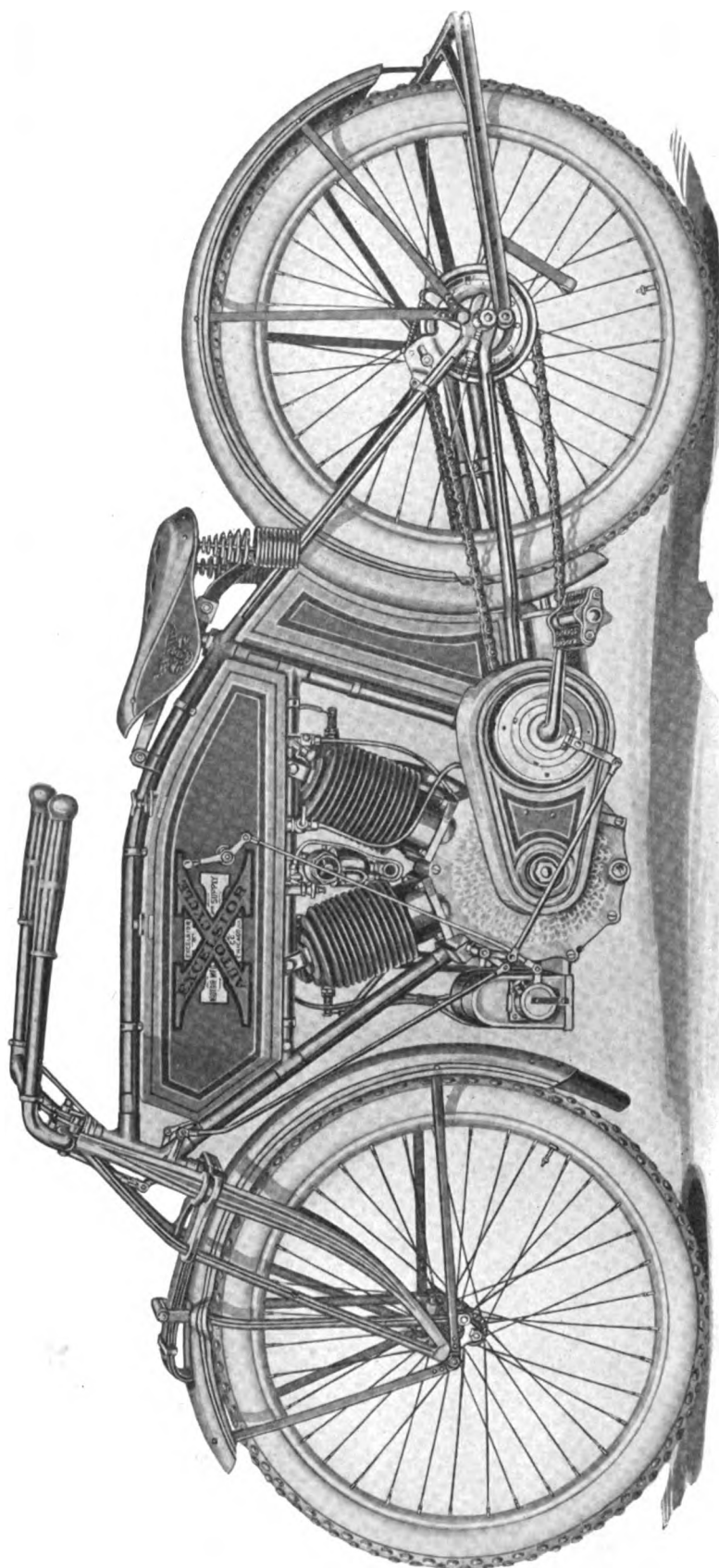
Excelsior Motor Mfg. & Supply Co.

Office and Factory
22d and Union Streets, Chicago

For 1913 Better Than Ever

Excelsior 1913 Twin

Chain or Belt
7 to 10 H. P.

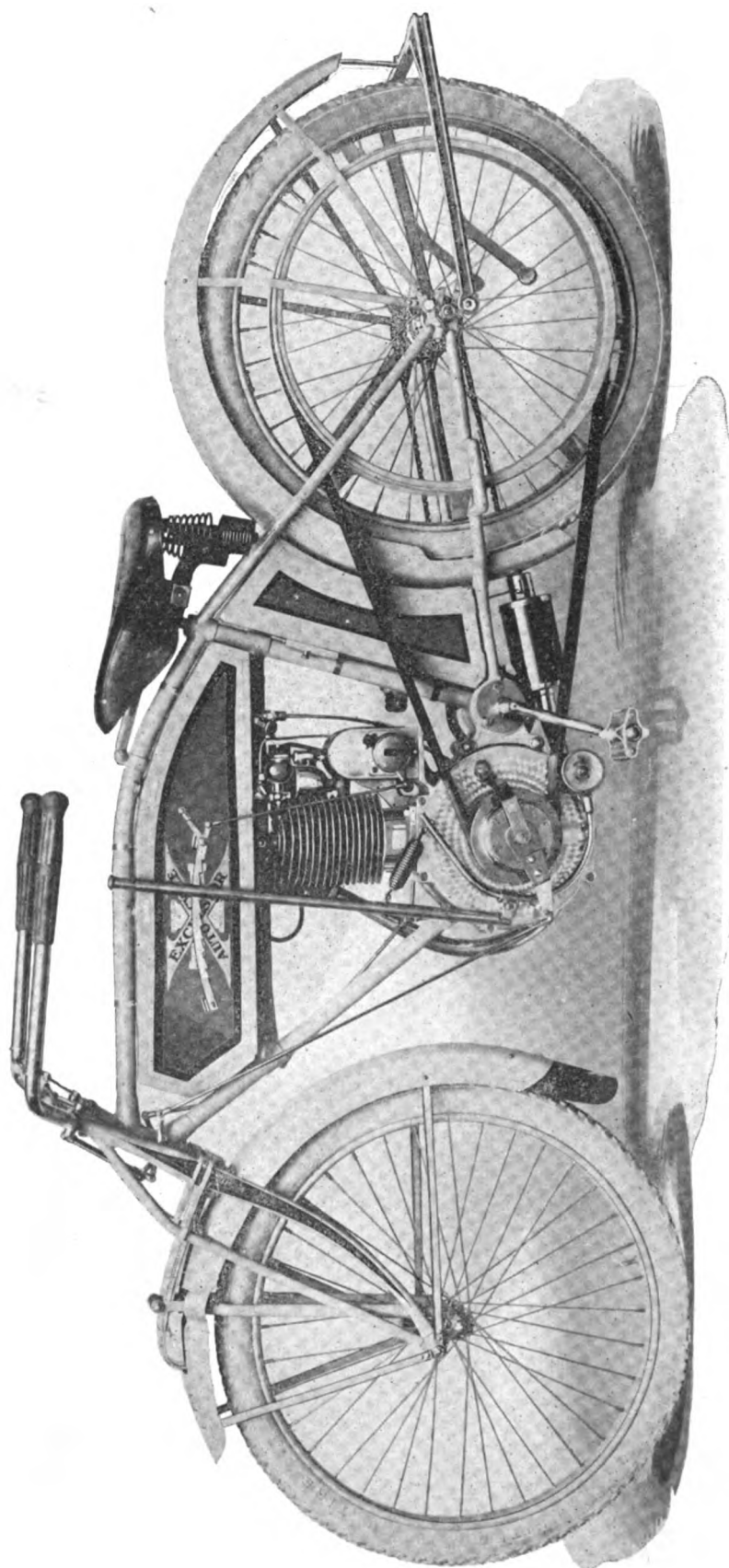


\$250.00

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Excelsior 1913 Single

Chain or Belt
4 to 5 H. P.



\$200.⁰⁰

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Riders Know the Facts Better Than Ever

1913 will witness the advent of thousands of new motorcycle riders, but just because they are "new" is no reason to suppose that a man is going to step into a store and say "Give me a motorcycle"; that he is going to take the first machine that is offered him. These new riders—and thousands of experienced others, too, for that matter—are going to make the most searching examination in comparison before they buy. They will demand power, speed and durability. The best machine is going to come out on top and the dealer will profit most if he handles the machine that will meet the demand; and if you secure the Excelsior agency now, you will be in a position to supply a machine that will please the "hard to please." The price on the Excelsior Auto-Cycle is right and the machine is right.

Riders Waited for the 1912 Excelsior

This year, despite the disadvantage of a late start, we have produced more than 9,000 Excelsior Auto-Cycles and it is our sincere belief that they are the best 9,000 motorcycles that have every touched the road.

Hundreds of these riders could easily have purchased some other make, but they preferred to wait and they did wait, but there will be no wait in 1913.

Demand for Excelsiors Will More Than Repeat Itself In 1913

For 1913 we have planned to build 25,000 Excelsior Auto-Cycles and they will be better than ever. We have the capital and equipment. More than half of our output is already sold. Dealers who want to get in with the Excelsior for 1913 and share in the big business are respectfully asked to talk "turkey" quickly. We are not going to take more orders than we can deliver. We require shipping specifications from our dealers and will make good on deliveries.

If you want more information, as you surely should, then fill out the coupon now. Please mail it today. Some other "live wire" may write tomorrow—you write today.

Something About the Excelsior Organization

The Excelsior Auto-Cycle is today a better machine than it ever was. The Excelsior organization, in factory, office and agencies, is more capable and efficient than ever. There is no waste of expense—no lost motion—no lack of harmony. "Good results." That's the thing we do and we do it right and with the least expenditure of time and money.

The present management brought to the Excelsior 37 years of successful manufacturing experience. We know how to make motorcycles and make them right and we have the inclination to actually make them right. No makeshift or slipshod methods go here—no skimping to save a dollar—no false economy. We do not merely "assemble" machines—we "build" them.

1913 Accomplishments

For 1913 we will produce four models. In fact, we have carried standardization to the extreme limit. We have embodied the best features in former Excelsior models in this new machine. We have also added many refinements and several practical improvements.

All the new features in the 1913 Excelsior have been rigidly tested here and they are right—so right that we believe the 1913 Excelsior will be the most satisfying motorcycle the trade has ever known.

SOME FIGURES

Harley-Davidson Company Tells How \$76,000 Went into Machinery Needed for Doubling Its Factory Output.

ACTING in the belief that figures are always interesting the Harley-Davidson Motor Co. has prepared a brief statement outlining some of its improvements and expenditures for the year ending October 1. It shows that the company purchased machinery costing \$75,945.48 during the year, and that all the machines included in this sum are now in use. These figures, however, do not cover new machinery for the factory in course of construction, nor do they take into account hand tools. The factory addition, containing 90,000 square feet, which was completed on September 9, represented an outlay of \$100,000, and the machinery equipment for that building cost \$75,000.

The largest item, \$18,017.50, was for lathes. This sum covers 35 lathes for various departments. Then comes an item of \$15,887 for automatic screw machines, 13 automatics being included in this bill. The larger automatic screw machines used in handling round and hexagonal stock, cost \$2,400 each. Considerable money has also been expended in the gear hobbing department. Six new gear hobbors were purchased during the year at an outlay of \$7,200, or \$1,200 apiece. Thirteen milling machines were installed at a cost of \$8,764.50, and 28 drill presses were purchased for \$6,164.12. Seventeen grinders meant an outlay of \$7,943 and five shapers cost \$2,150. An additional outlay of \$3,510 was made for punch presses. These figures show the trend of the improvements, but they do not cover a number of items ranging from \$1,000 downward, all of which were needed to permit of doubling the company's output of machines.

THE FOREIGN MARKET.

THE standing which American-made tires are attaining in foreign countries in competition with the product of the best European factories is strongly indicated in an announcement made by Backdahl & Company, of Stockholm, that they have just closed a contract to supply 750 sets of United States Tires for taxicab service in Norway, Sweden, Denmark and Finland.

The United States company's increase in foreign trade is going beyond all expectations.

FIRST DAYTON DELIVERED.

THE Davis Sewing Machine Company, of Dayton, Ohio, delivered its first Dayton motorcycle to the Beckley Ralston Company, of Chicago, on October 29. Mr. Huffman, sales manager for the Dayton, states that from now on a steady supply of the new machines will be turned out and that prompt deliveries may be expected.



Miss H. Georgie Merrill, of Cumberland, Md., on 7-h., 2-speed Indian.

VAN CLEEF ACTIVITY.

A REPRESENTATIVE of Van Cleef Bros., Chicago manufacturers of the standard line of cements and motor specialties which has become widely known in late years, is now on an eastern trip which has resulted in the lining up of much new business for 1913. The firm has a big factory at 7709-7711 Woodlawn avenue, Chicago, which is being improved in several departments with a view of satisfactorily meeting an increased demand for Van Cleef products during the coming season.

THE Fisk Rubber Company, of Chicopee Falls, Mass., is building a new branch house and service station adjoining its present quarters at 456 Milwaukee street, Milwaukee, Wis.

FIFTY PER CENT INCREASE

This Is the Basis Upon Which United States Tire Company Is Planning Output for the 1913 Season.

IN planning for their 1913 output, tire manufacturers are proceeding along broader lines than have ever been known in the history of the motorcycle industry. The reason for this expansion of production facilities, as might be taken for granted, is that there will be a greater demand for motorcycle tires next season than ever before. With the prospect of over a quarter of a million machines in operation it is very evident that a wonderful bulk of tires will be required to keep them going.

Commenting on next season's prospects, from the tire-maker's point of view, M. C. Stokes, eastern district manager of the motorcycle department of the United States Tire Company, has the following to say:

"Our 1912 business was fifty per cent. ahead of that of the year previous, and 1913 certainly will show an advance of fifty per cent. over this year. The factory business for which we have already contracted for next season, is a pretty good indication that 1913 will be a hummer. The manufacture of motorcycle tires used to be incidental to the production of automobile tires, but this is no longer the case. The business has grown so remarkably during the past three years that making motorcycle tires is now an industry by itself and the United States Tire Company so regards it. We are constantly increasing our motorcycle equipment so as to give us the output necessary to fill our orders.

"We are announcing a new chain tread tire, which gives us four styles of tread—chain, nobby, studded and corrugated. Another important innovation in our tires is that in future they will all be made of white stock, giving them an exceptionally trim appearance."

TWO NEW AGENTS.

J. LOUIS ANDERSON, of Salt Lake City, and the Texas Auto Company, of Fort Worth, Texas, have contracted for the 1913 Harley-Davidson agencies in their respective cities. Heretofore the motorcycle has not received the attention due it in these localities and the Harley-Davidson agents look forward to big things. With extensive plans under way for road improvements the motorcycle outlook in this section is very bright.



THE YALE "FLYING SQUAD."

A NEW idea in covering territory has been launched by the Consolidated Manufacturing Company, of Toledo, Ohio, which now has twenty salesmen known as the Yale

"Flying Squad." They left Toledo recently on a trip that is intended to cover the state of Ohio thoroughly. The plan is to divide the state into strips lengthwise and assign one squad of riders to each strip. They are to begin at one end of the state and work to the

other. En route they will close contracts in each town and city for the 1913 Yale products, picking out the most active dealer in each town. By the time these squads have traveled the length of the state, the Yale will be well represented in every locality.

THE ATLANTA WIGWAM

Handsome Hendee Branch Now Under Way Will Afford Southern Motorcyclists Every Convenience.

SURPASSING in architectural beauty and luxurious appointment any establishment of its kind in the country, the new Southern branch of The Hendee Manufacturing Company at Atlanta, Ga., typifies a fitting recog-



New Hendee Branch in Atlanta, Ga.

nition of the substantial growth which motorcycling is enjoying in Dixie Land. Centrally located at 457 Peachtree St., the city's main automobile thoroughfare, the building is provided with special facilities for efficient conduct of the motorcycle business. Steel and brick predominate in the construction, now under way, and it is expected to be ready for occupancy December 1. Standing two stories with basement, one-half of the handsome structure will be occupied by The Hendee Manufacturing Company, which will utilize a floor space 25 x 125 feet approximately, for all floors. Complete elevator service is provided. With its white tile facade and large double plate-glass windows with luxfer prism panels, the building possesses a quiet but rich appearance which enhances the already notable prestige of the boulevard on which it stands.

An extensive stock of all models and parts, and a complete service department will be maintained, the station providing full factory facilities at short range for the States of North and South Carolina, Georgia, Florida, Alabama, Mississippi, and Tennessee.

On the first floor will be located the sales rooms, parts and accounting departments, and the manager's private office. Upstairs a reception room, tastefully appointed, will be maintained for visitors. One of the features of the establishment will be the service department in the basement, which will be equipped to execute any repair on an Indian motorcycle.

The rear of the structure is inset from the building line, affording an open-air court, with overhead shelter, which will accommodate a large number of machines. Access to the service department is afforded by two contiguous passages at the rear, the street grading being such as to permit of a machine being ridden directly onto the garage floor.

The branch will be in charge of W. E. Johnston, who is a native of Atlanta. Just having relinquished the management of the Denver branch, he is exceptionally well

MINNEAPOLIS PLANT IS IN NEW HANDS

Backed by Strong Organization, Recently Formed Minneapolis Motor Company Will Continue Manufacture of Improved Models, in an Enlarged Plant—Incorporated for \$500,000.

AT the annual meeting of the stockholders of the Minneapolis Motorcycle Company, held at the executive offices of the company at Minneapolis, Minn., on November 4, it was unanimously decided to accept a proposition made by a company consisting of some of the most influential business men of the Northwest, that they purchase the business of the Minneapolis Motorcycle Company outright. The new company, known as the Minneapolis Motor Company, is incorporated for \$500,000, and is transferring the business to a large plant, admirably adapted for the manufacturing of motorcycles in large quantities. The name of the machine will remain the same, but almost a complete change is noted in the personnel of the company.

P. M. Starnes, the president of the new company, is well known in industrial circles. He is vice-president of the American Timber Holding Company, and is connected as officer and director with a number of financial and industrial enterprises. The vice-president, F. E. Kenaston, is president of the Minneapolis Threshing Machine Company, and is a man of wide mechanical experience. He is connected with several of the leading financial institutions of the Northwest. F. E. Starnes,

who takes up the general management of the new company, is also secretary and treasurer. Mr. Starnes is a young, energetic and keen business man.

The originator of the famous Minneapolis Two Speed, J. M. Michaelson, has been appointed chief engineer. Mr. Michaelson is a very thorough, competent and efficient man in this department and may be depended upon to make the most of the opportunities offered him through the reorganization of the company.

The general policy of the Minneapolis Motor Company will be to elevate the already high standard of the Minneapolis motorcycle and Minneapolis tri-cars, and to assume the most liberal policy possible towards dealers and riders.

In short, the company—backed by a capable organization and plenty of capital—will leave nothing undone to keep the Minneapolis machines in the front rank of American motorcycles, and its 1913 models will show a number of improvements of exceptional interest. Steps are already being taken to pave the way for prompt deliveries of the new machines, and there is every indication that they will enjoy a lively boom for the coming season.

equipped for his new berth. Pending the opening of the new building, temporary headquarters are being maintained at 257 Peachtree St.



VIM COMPANY'S PRESIDENT.

JOHN W. HENRY, president and treasurer of the Vim Cycle & Hardware Company, of Buffalo, N. Y., appears in the accompanying photograph. Mr. Henry heads a hustling organization which has done much to advance the interests of motorcycling and bicycling in its territory, and his versatility and boundless energy have been among the chief assets responsible for the upbuilding of a thriving business. The Vim company manufactures Vim bicycles, distributes Excelsior motorcycles, National bicycles and Vim tires and carries on a large jobbing trade in motorcycle and bicycle sundries. The company's territory consists of New York state, west and north of and including Cayuga, Cortland and

Tioga counties, Monroe county being excepted; also Pennsylvania, north and west of and including Tioga, Clinton, Cameron, Elk, Jefferson, Clarion, Benango and Mercer counties.

NEW BAXTER TYPE.

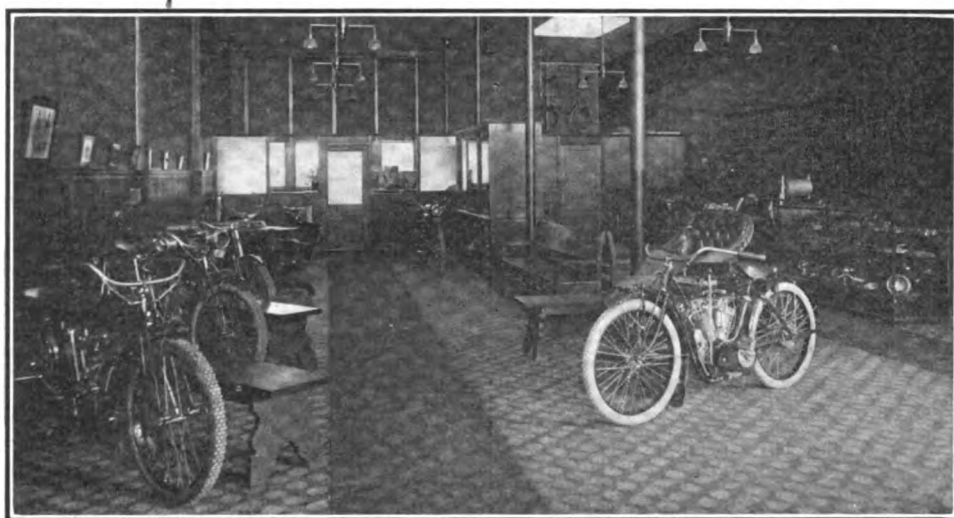
ANNOUNCEMENT is made by the Baxter Sidecar Co., of Cambridge, Mass., that it is preparing to market a new sidecar type particularly adapted for use with the new spring-frame Indian models for 1913.

BAKER'S LONG TRIP.

E. G. BAKER, one of the busiest long-distance motorcycle tourists in America, passed through New York recently en route to Philadelphia, from which point he will start back west with Indianapolis as his objective point. Mr. Baker is superintendent of the motorcycle tire department of the United States Tire Company's Indianapolis factory and indulges in track and road riding, principally for the purpose of testing tires and determining their efficiency under all sorts of conditions.



E. G. Baker.



HOLDEN'S FINE ESTABLISHMENT.

THE accompanying photograph shows an interior view of the new Boston (Mass.) store of George N. Holden, agent in that city and in Springfield for the Indian. The store, with its forty-foot frontage, is one of the most imposing in the country. It is seventy-four feet deep, which affords on the street floor and in the basement a total floor space of 5,920 feet.

The street floor is devoted to the display and sale of Indians, parts, accessories and motorcycle clothing. The cabinet shown at the right contains nearly 1,500 drawers, each of which has its quota of parts or accessories. So large and varied an assortment is carried that it has been found necessary to install a card system to keep tab on it. Leggings and clothing are on display in the show case occupying the center

of the store. The room in back of the glass partition is split and the right hand side given over to the storing of stock. At the left are two "rain vision" windows through one of which the cashier—but why dwell on that part of it. At the other window those in trouble receive assurances of speedy relief from the head of the service department. In this office also a record of every transaction is kept in fireproof files. A row of potted palms which unfortunately do not show in the photograph afford an effective and artistic screen at the rear of the show windows.

The basement is reached by a rear entrance and is divided by a wire partition. Two-thirds of the space is given over to one of the most completely equipped repair shops in the country, while the balance is devoted to the storage and uncrating of new machines.

HUDSON COUNTY HUSTLERS.

ONE of the busiest motorcycle establishments in Hudson County, New Jersey, is that presided over by Boller Bros., at Union Hill. The proprietors are enthusiastic riders, and much of the progress made by the Hudson County M. C. during the past season is credited to their activity. Albert Boller, president of the club, and Gottfried Hess, its secretary, made up the committee of arrangements for a highly successful outing held recently on Staten Island. One of the features of the program was a pig chase, and when the porker was finally caught it was left with a farmer on the Island to be fattened. On November 2 a bulletin was received to the effect that the pig was in trim for the table, and a big feast was spread at Hector McNeil's place in Union Hill. Plans are under way for organizing bowling teams among the riders, and the coming winter promises to be a busy one for the club.

In October President Boller, of the club, and Chief of Police William Clossey, of the famous Hudson County boulevard squad of motor cops, made a trip to the Indian factory in Springfield, Mass. The Bollers are agents for Indian and Excelsior machines in their district.

NO less than 208 riders participated in a recent hill-climbing program of the Liverpool (Eng.) Auto Cycle Club. The events held on private ground, drew hundreds of spectators.

HEARSEY-WILLIS CATALOG.

AS attractive a tire and rubber accessory catalog as has come to hand in some time is from the headquarters of the Hearsey-Willis Co., of Indianapolis. It is a 36-page booklet, well printed and illustrated, and deals instructively with the company's line of motorcycle grips, lagging, pedal rubbers, generator tubing, blow-out patches and other sundries for motorcycles, as well as for automobiles and bicycles.

TRIUMPH RECEIVER NAMED.

DETROIT, Mich.—The Security Trust Company has been appointed receiver for the Triumph Mfg. Co., manufacturers of Triumph motorcycles, on petition of three creditors, the Haverkern Contracting Co., Standard Electric Co. and the Sterlinger Co. The combined indebtedness to the three petitioners amounts to about \$2,000. The total liabilities of the Triumph Co. are \$62,000 and the assets are given as \$130,000.

The Haverkern company claims are for work done in remodelling the firm's plant at 51-55 Woodbridge street, and the Standard Electric Company's bill is for wiring the same, while the Sterlinger Co. has money due for furnishing parts for motorcycles.

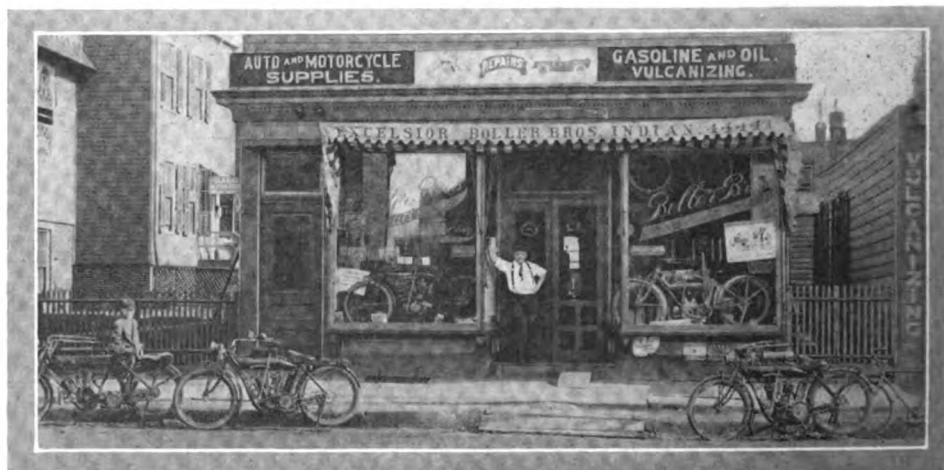
According to the Security Trust Co., the business is in fairly good shape. The most valuable assets are parts for 2,000 motorcycles and there are orders on hand for 1,280 machines. It is deemed advisable to continue the manufacture of motorcycles and fill orders, in which event it is believed the creditors will soon be paid off in full. The machinery of the firm was secured on contract and hence cannot be converted into cash.

CHANGE OF NAME.

ANNOUNCEMENT is made by the manufacturers of the V-Ray spark plug, formerly known as the Marshalltown Motor Material Manufacturing Company, Inc., that papers have been filed with the secretary of the State of Iowa changing the firm name to the V-Ray Company, Inc. This announcement is accompanied by a statement to the effect that the company has increased its producing facilities five-fold. New machinery is being installed, and the working force has been enlarged. The company's products will be on exhibition at both the Madison Square Garden show, in New York, and at the Chicago show. At the latter place their giant 254-pound plugs will be shown in operation.

RUNNING DAY AND NIGHT.

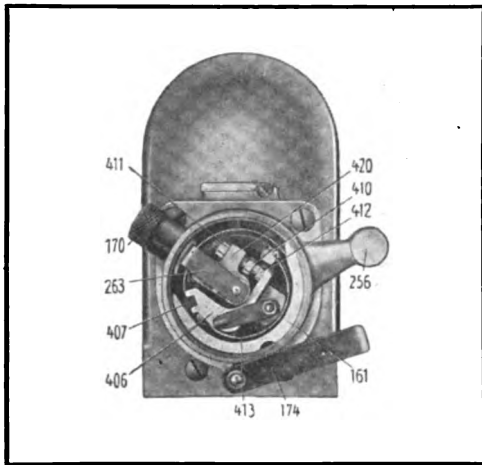
THE steady pouring in of orders for 1913 Yales has made it necessary for the factory at Toledo to run day and night, the first night shift having been put on November 11.



Motorcycle Headquarters of Boller Bros., in Union Hill, N. J. These Agents are Active in Club Affairs as Well as in Trade Circles.

SETTING THE NEW BOSCH ZE1 MAGNETO

THIS magneto, the latest addition to the motorcycle line of Bosch goods, is of the true high tension type, in which the high-tension current is generated in the winding of the armature without the use of a separate coil, etc. A permanent magnetic field is formed by two powerful horseshoe steel magnets between the pole-pieces of which is rotated an I-shaped armature. This armature carries two windings, the *primary* consisting of a few turns of heavy wire, and the *secondary*, of many turns of fine wire. The secondary is a direct continuation of the primary winding. When the armature is rotated, a circuit-breaker interrupts the primary circuit, and a current of high intensity is produced in the secondary winding. This secondary or high-tension current passes to the slip-ring and is taken off by a carbon brush and cable to the spark plug.



The circuit-breaker is carried in a movable casing outside of the magneto, but attached thereto, and by moving the casing the timing of the ignition spark can be varied, either early or late, through a range of 30 degs. on the magneto or 60 degs. on the crank of the

motor. For each revolution of the armature but one spark is produced, and as a four-stroke single-cylinder motor requires but one spark per two revolutions, the armature is driven at half the speed of the crank-shaft, or at cam-shaft speed.

To set the magneto, the piston is to be brought up to the top dead-center on the compression stroke. This may be done by turning the motor over until the exhaust valve is just closed; then giving the crank-shaft one complete revolution, neither more nor less. The circuit-breaker casing of the magneto should then be turned so that the red mark that it bears is in line with a red mark on the circuit-breaker end-plate. The holding spring 174 is turned aside and the cover 173 removed, to get at the breaker, and the armature is then turned in the direction that it will be driven until the circuit-breaker lever is seen to remove or until the platinum points are in the act of separating.

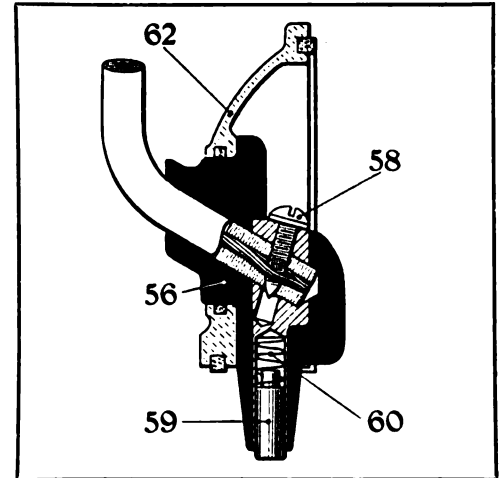
With the armature held in that position the driving gears should be meshed, and great care should be exercised to prevent the armature and crank-shaft from moving with relation to each other.

With this setting, ignition occurs at top dead-center with the red marks in register, and an advance of 20 degs. is obtained with the spark control in fully-advanced position. The setting will also enable a spark to be produced after the piston has passed top center on the compression stroke, enabling slow running under a heavy load. The 20 deg. advance has been found to be sufficient for the average motorcycle motor.

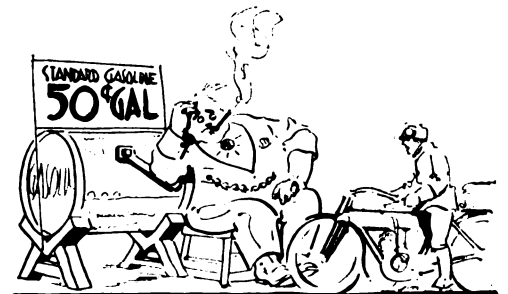
Having timed the magneto, the spark-plug is next to be coupled up to the magneto. This is made as follows: Bonnet 62 over end-plate 51 is removed after taking out two screws immediately below the vulcanite brush-holder 56. This exposes the holder and its brush 59. Take out the small piercing screw 58, cut the end of the high-tension cable square and thrust it into the cable opening on the outside of 56 as far as it will go. Replace and screw home the piercing screw, which pierces and fastens the cable as shown in the second figure. The connection is perfect, but the cable must be 7 millimeters in diameter in order to fit the opening. This diameter is the regular size of cable used for this service.

Ignition is cut off by grounding or "short-circuiting" the primary circuit and can be done by either of the following methods:

1. By retarding the ignition to the most extreme point. In that position a flat spring attached to the binding post 170 in the circuit-breaker casing is in contact with a grounded pin on the magneto end-plate.



2. Binding post 170 may be connected to ground through a switch or button, one wire being taken from the binding post to the switch, where the operation of the switch or button establishes a circuit from the post through the wire, handlebar, frame and magneto, thus cutting off the ignition. When the switch is opened, the ground connection is broken and the magneto will generate.

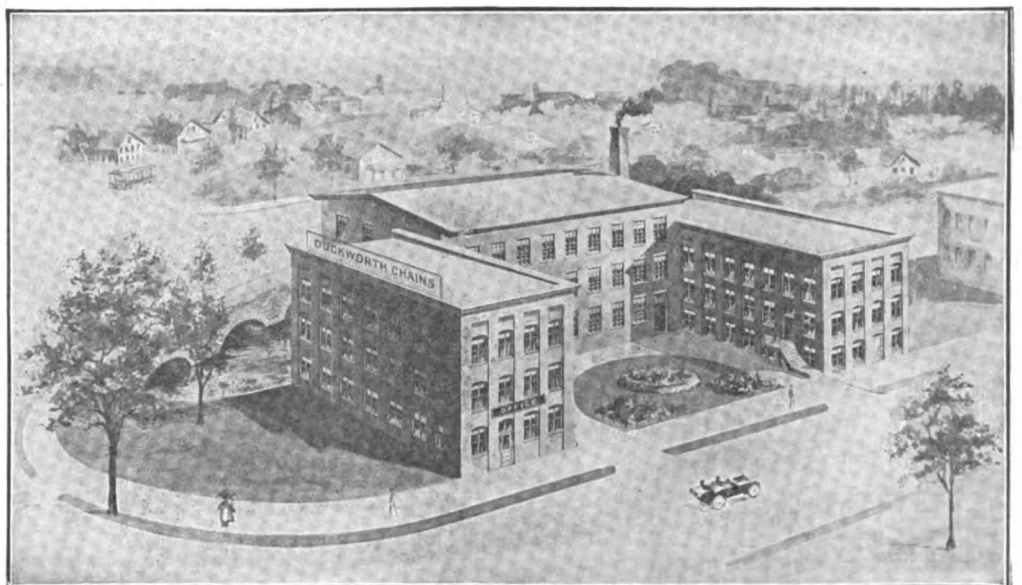


A suggestion from our correspondent in London, where it is announced that further increases in gasoline rates may be expected.

DUCKWORTH PLANT.

IN the accompanying photograph is shown the enlarged plant of the Duckworth Chain & Manufacturing Company. A new wing was added recently, but despite the greatly increased facilities thus afforded the company finds it necessary to operate on a special schedule in order to meet the demands for the coming season. The rigid manufacturing and inspection system always associated with the Duckworth products is being admirably maintained in the face of unprecedented demands, and the 1913 season promises to enhance still further the reputation of the company's chains. The factory now has an added floor area of 7,500 square feet.

It will be noted that special care has been exercised in laying out the factory and grounds, and this spirit has been carried by the company throughout the entire establishment. Systematic handling of raw material, as well as the finished products accounts for much of the firm's success, and by fostering co-operation among its employees the company has obtained truly remarkable results in this direction. With the greatly increased floor space embraced in the recently completed addition it is estimated that the output will be at least doubled for 1913.



PIERCE PLANS

Former President Percy P. Pierce Will Form \$250,000 Company to Take Over Assets of Pierce Cycle Co.

BUFFALO, N. Y., November 12.—Within the past few days the plans of The Pierce Cycle Company have taken definite form. Percy P. Pierce, former president of the concern, has gone into the company and it is understood that he will ultimately take entire charge of affairs. Mr. Pierce is forming a \$250,000 company, to take over the assets and good will of The Pierce Cycle Company, which he has already bought from the present owners. In the meantime the factory is being operated in all departments to about one-half its normal capacity. Parts, repairs, new bicycles and motorcycles are being delivered daily. Raw material, equipment, etc., is being bought constantly, and production will continue without the slightest interruption, or hold-up in deliveries. All special quotations previously made on bicycles, motorcycles or parts were cancelled on and after November 7. The prices applying on machines are those contained in 1912 contracts.

Fortunately for the new management, Mr. Hancock, as trustee, made arrangements for 1913 models several months ago. The plans previously made will go into effect immediately. There are a number of changes and

improvements projected. A complete announcement of 1913 models will be given within two weeks. At present it can be stated that the line will include improved single-cylinder and four-cylinder models, and it is predicted that a twin model will also be added, which will give the Pierce people the unique distinction of being the only makers of singles, twins and fours.

Sales Manager W. A. Johnson is now on a business trip to the Pacific Coast, during which he will touch at all the larger cities.

CLEVELAND, Ohio.—The Auto Mart Company has been incorporated with a capital stock of \$10,000, to deal in and rent motorcycles, and deal in supplies of all kinds. The incorporators are Edward C. Plietz, W. G. Radcliffe, William H. Hasselman, William R. Wallace and Louis C. Heimberger.

HARRY D. IMMEL, of 5645 Penn avenue, Pittsburgh, Pa., best known as "winner of the Cleveland-Pittsburgh Road Race," is about to open a shop where he will handle the 1913 Excelsior, Triumph and Henderson, together with a stock of motorcycle sundries and parts.

ALWAYS abreast of the times, B. A. Swenson, Providence (R. I.) agent for Indian machines, posted baseball bulletins in the window of his establishment during the recent world series and thereby drew large crowds.

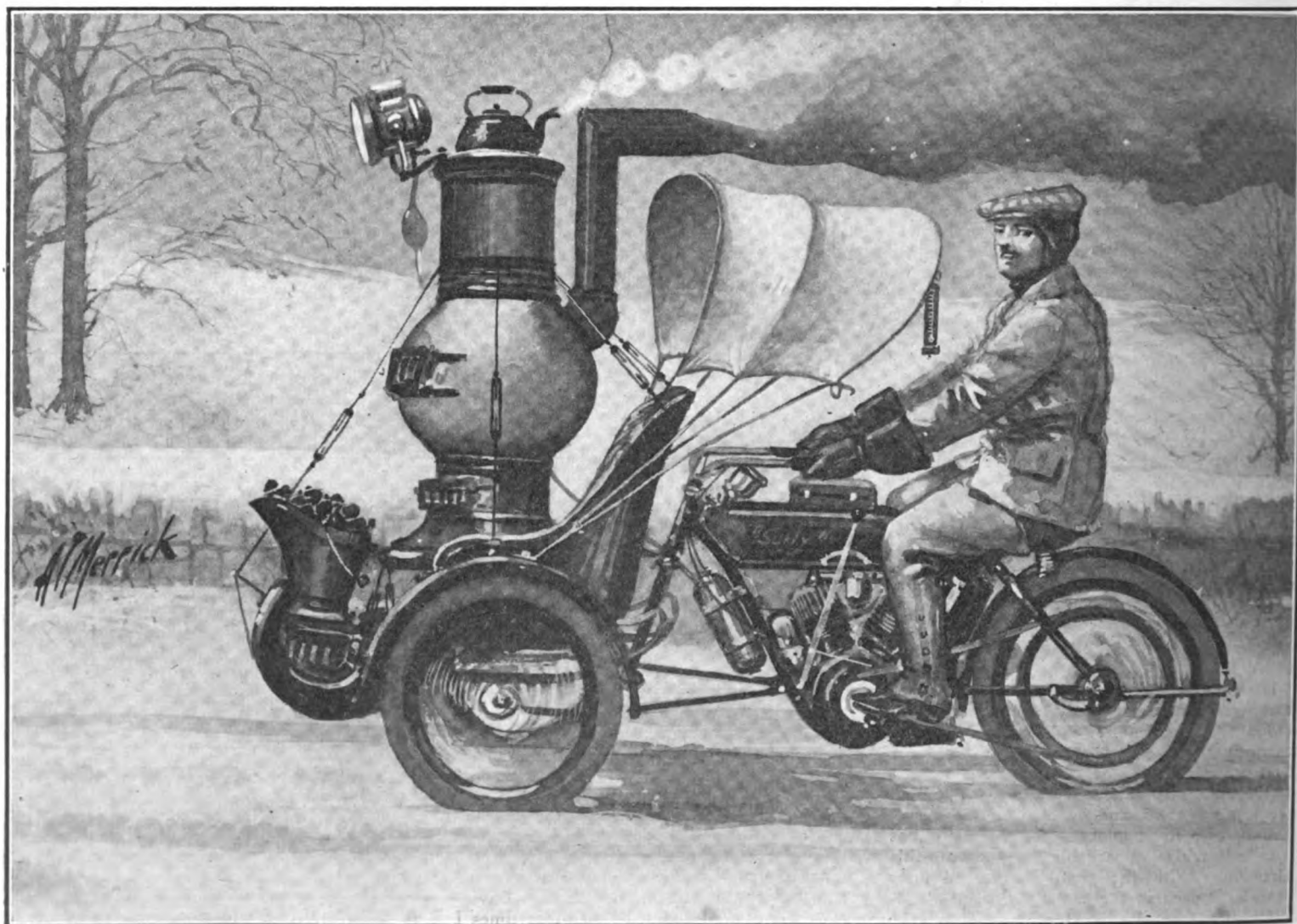
SABO MOTORCYCLE LOCK.

COMBINING sturdiness, extreme simplicity and effectiveness, the Sabo motorcycle lock, produced by the Sabo Mfg. Co., 3110 West Twenty-fifth street, Cleveland, Ohio, is a fitment that has grown rapidly in favor wherever it has been demonstrated. It locks the stand to the frame—in the down position—and as a result it is impossible to roll the machine or push it. There are no chains to be cut by pliers, and it is impossible to break spokes or the drive chain by absently pushing the machine off the stand, as might be done with some other types of locks that extend through the wheel. The company has designed locks suitable for all Indian models, 1912-13 Harley-Davidson types and Excelsior, Thor and Flanders machines.

WHOOPIING UP SALES.

THE Chicago Cycle & Supply Company is making elaborate preparations for 1913. The company now has six men, carrying a complete line of samples, traveling through the West, Middle West and South. It has also secured large space for the Chicago Show and will display a full line of accessories. An instructive and attractive catalog will be sent to dealers on request.

HARRISON SHOOK is making a motorcycle trip from his home in Chippewa Falls, Wis., to the Gulf Coast. He is in the employ of a publishing company.



Some Timely and Distinctive Equipment Pointers for the All-Year Motorcyclist.

Members of the Los Angeles M. C. "Annex." Coasting on the Banking of the Famous Mile Saucer at Playa del Rey.



A Scene near the Judges' Stand at the Los Angeles Track after the Recent Blue Ribbon Races. It will be noted that the fair enthusiasts are still in the limelight, and that they are attired in keeping with their surroundings. The Stadium races have been well attended so far this season, and enthusiasm runs very high.

A BRITISH TRIBUTE.

DISCUSSING motorcycle stroke and bore ratios in *The Motor*, of London, a contributor pays a tribute to the excellence of design of the Hedstrom motor, used exclusively on Indian motorcycles, in the following words:

"The 5 h. Indian engine is so different, and, in my opinion, in many ways superior to English engines, that I hardly care to rely on its performances as evidence one way or the other."

The bore and stroke respectively of the Indian 5 now discontinued was $2\frac{3}{4} \times 3\frac{3}{4}$ inches, giving a stroke and bore ratio of 1.3 to 1.1, while the Indian 7, with cylinders $3\frac{1}{4} \times 3\frac{43}{64}$, has 2.2 to 1.95 stroke to bore relationship.

JOHNSON IS RETAINED.

ANNOUNCEMENT is made that the Pierce Cycle Company is laying plans for the continuance of its business on even a larger scale than in the past, and dealers and riders are assured that the high standard of the company's products, established through years of expert designing and conscientious manufacturing, will be maintained in future models. W. A. Johnson has been retained as sales manager for the company.

BRIEF AND TO THE POINT.

"**W**E are distributing Yale machines for New York, Westchester, Richmond, Kings, Queens, Rockland, Putnam, Orange, Dutchess, Ulster, Nassau and Suffolk counties," writes the Gotham Motor Co., of 92-98 St. Nicholas avenue, New York, "and we are on the scout for live 1913 agents."

PITTSBURGH DEALERS.

THE Motorcycle Exchange, 5606 Penn avenue, will again handle the Indian exclusively, acting as distributors for Allegheny County.

Harry L. Neff, of 106 Federal street, will continue to handle Thor and Merkel machines, as well as bicycles and a general line of sporting goods.

A LETTER ON SADDLE-BAGS.

THEODORE J. WERLE, traveling lecturer for the Wisconsin Anti-Tuberculosis Association, has written an interesting letter relative to his method of solving the luggage problem. He uses one of the Harley-Davidson carriers, designed primarily to meet the requirements of R. F. D. riders, and finds that he is able to carry a remarkable assortment of luggage without undue annoyance or strain upon his machine. Werle is using the first carrier of this type turned out from the Harley-Davidson factory, by the way. The lecturer writes as follows:

"Let us say that you want to go on a trip and carry your outfit with you. The saddle-bags as fitted on the H.-D. carrier, will hold all of your personal belongings, and will keep clothes perfectly dry and clean. In my saddle-bags I carry one extra suit of underwear, one extra pair of breeches, six pairs of sox, an extra shirt and a dozen clean handkerchiefs, besides a set of military brushes, a safety razor, a mirror, and a few magazines with which I fill in the time between darkness and bed by the light of my headlamp. The bags also hold for me one three-pound blanket, one mosquito hood, a slicker coat and hat, a hunter's ax, five or six straps, an extra inner tube, a number of pamphlets, my road maps and any other miscellaneous things I may pick up along the road.

"The value of the saddle-bags, however, does not end with their generous capacity. At night one serves as a pillow, while in the other I place my watch, money and other valuables for safe keeping. By sitting on one and taking the other on my lap I have a perfect writing table. While I am not using them that way, they sometimes take the place of my washstand and shaving table. They also make a perfect dining table, because I can stick my legs through between them while sitting on the ground.

"In my work it is often necessary for me to have a sort of counter to pile reading matter upon; for this also my new Harley-Davidson carrier is well adapted. At other times I need a stand upon which to set my stereopticon during lectures and here again I use

my luggage carrier. Only the other day I needed a platform from which to speak to an audience and I could have found nothing better than my luggage-carrier. Many times friends come to visit me while I have my tent pitched in some small town, and the only seat I can offer them in my parlor is the luggage-carrier on my machine. So important has my carrier come to be that I can safely say my machine would be practically useless to me without it."

AGENCY CHANGES.

A RECENT announcement from the Bal-four Hardware Company, of Savannah, is to the effect that they will concentrate their efforts on the sales of Harley-Davidson and the Henderson machines for 1913.

R. R. Oakman, formerly Merkel agent in Savannah, will during the coming year handle Indian, Pope and probably Yale machines. For the past four or five years Indian interests in Savannah have been taken care of by the Harris Tire Company, which will henceforth devote its efforts to the advancement of the DeLuxe. It is also rumored that they will act in behalf of the Excelsior.

GOODYEAR CONTEST.

WITH a view of assisting dealers in general and to obtain first-hand data for its Dealers' Service Bureau, the Goodyear Tire & Rubber Co. recently offered a prize of \$10 for the best letter giving the story of an actual experience with local advertising. It is the aim of the bureau to ascertain the methods which have been found most successful by local dealers, and to assist them in mapping out new campaigns. Aside from the first prize the company announces that five dollars will be paid for each letter considered interesting enough to appear in print. The competition is open to all dealers.

AUTOMOBILE and motorcycle races were held in connection with the Belmont County Fair, at Philadelphia, October 20.



T

THE accompanying photographs, showing interesting scenes in Vancouver, B. C., are forwarded by James F. Cameron, of Lebanon, Tenn., who toured that country last Spring. No. 1, a typical road scene; 2, a halt for refreshments at Nanaimo; 3, hard going in sand; 4, a Vancouver regiment on the march; 5, a broken pedal being repaired under difficulties.





Bulletin

Telegram just received:

"Yellow Pup" won every heat and race entered except one at Motordrome.—Hans Johnsen, Dallas, Texas.

At Seattle, Wash.: Fred Mercier won the big 10 miles free-for-all and broke all dirt track records, afterwards defeating racing auto in match race. Hagger (also Flying Merkel) won other two open races, defeating special machines.

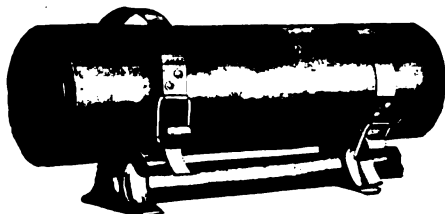
THE FLYING MERKEL

One-quarter the United States closed last week; did you wire for territory?

MIAMI CYCLE & MFG. CO., 300 Hanover St., Middletown, Ohio

CLARK TANK BRACKETS.

RIDERS who have had trouble with acetylene tanks due to their constant shifting and shaking, will be interested in knowing of an extremely efficient bracket, which is now being marketed by the W. F. Clark Mfg. Co., 3551 W. 23rd street, Chicago. This bracket is made in two models, model "A" being designed especially for Excelsior Auto-Cycles, permitting of the tank's adjustment on the handle bars, while model "B" is for those who prefer the tank attached to the top cross bar of the motorcycle frame. Distinctive features



of the Clark brackets are extreme rigidity, a flaring base which rests lightly on the gasoline tank, preventing the acetylene tank from jarring the base on the roughest roads, and ease and quickness of attaching.

"MADE IN MINNEAPOLIS."

MINNEAPOLIS, Minn.—For some time past merchants and manufacturers of Minneapolis, Minn., have been planning to hold a combined exhibition of all articles manufactured in the city, in order that the inhabitants might fully realize the extent of local industries, and this determination led to a "Made-in-Minneapolis-Week," from Monday, October 28, to Saturday, November 2.

Needless to say, the Minneapolis Motorcycle Company was among the leading exhibitors. The firm displayed one of its light delivery tricars with an operator in livery astride the machine. This outfit is used to a large extent by the local merchants and has given perfect satisfaction. Among the other models displayed was the two-speed "Big Five."

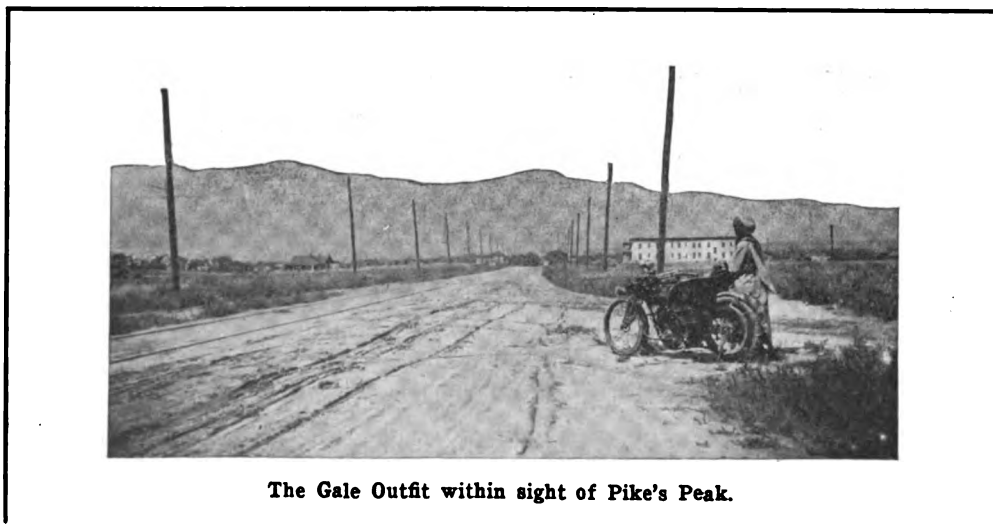


The New Recruit—"There's nothing like a lock to protect a motorcycle, but when a guy leaves a fine kit of tools right on the machine what does a lock amount to?"

A BULLETIN FROM GALE.

"PIKE'S peak or Bust."—It certainly would have been 'bust' for us were it not for Weed Anti-Skid Chains," cheerfully postcards Mr. M. E. Gale to F. E. Sparks, 1430 Michigan avenue, Chicago, western distributor for Weed

chains. Mr. Gale and his wife are that much talked-of couple who are taking a little jaunt from Angola, N. Y., to California and return. The accompanying photograph typifies the usual road conditions encountered, with Pike's Peak in the background.



The Gale Outfit within sight of Pike's Peak.

MASON RESIGNS.

M. E. MASON, widely known in tire circles, has resigned as assistant district manager for the central district of the United States Tire Co. Mr. Mason was for sixteen years in the employ of Morgan & Wright; from 1897 to 1903 he was manager of the company's bicycle department, and in charge of the carriage tire business. During the last year Mr. Mason has devoted most of his time to the selling end of the solid motor tire and pneumatic automobile tire departments, in which he maintained his reputation for result-getting. His plans for the future are at present indefinite.

HEDSTROM "COMES BACK."

ELECTION DAY was a novel occasion for Oscar Hedstrom, of The Hendee Manufacturing Company, for he cast his first vote in twenty years. This very moderate exercise of franchise privileges was not due to indifference, as he frequently registered, but usually was at some race meet in another city on the first Tuesday in November. This year the Wigwamite was in a position to cast his vote, and his enthusiasm made up for lost time.

PAY ATTENTION

We are now ready to consider applications
for 1913 agencies for

Yale Motorcycles

in New York-Westchester-Richmond-Kings-Queens-
Rockland-Putnam-Orange-Dutchess-Ulster-
Nassau and Suffolk Counties.

No SLEEP WALKERS
WIND JAMMERS or
DAY DREAMERS Need Apply

GOTHAM MOTOR CO.

DISTRIBUTORS

92-98 St. Nicholas Ave.

New York City

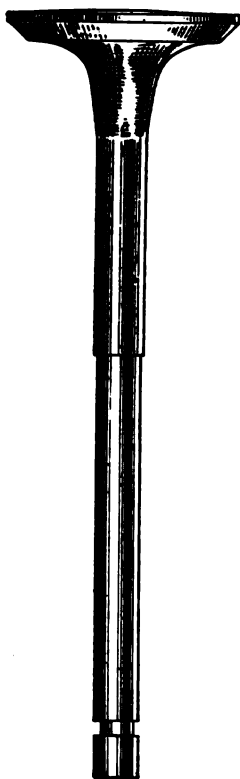
Motorcycle Valve Stems

get the hardest use of any
gas engine valve. The prob-
lem is to make them so they
will not break or burn up.

By using the toughest steel,
properly heat treated, we
overcome the breaking, and
by welding a cast iron seat
to the head we eliminate the
pitting, burning and warping.

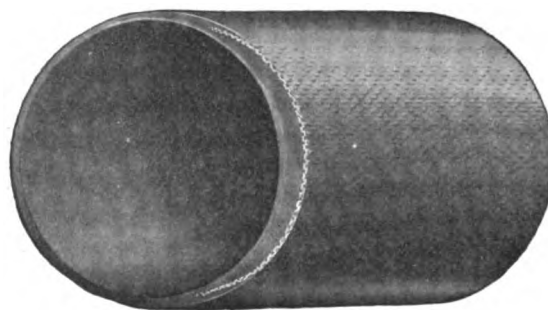
Long service in the most pop-
ular machines has proven
these things.

If you are not using them,
will you go into the matter
with us?



The Electric Welding Products Co.
Cleveland :: :: Ohio

Brown Scientific Non - Deflating Pneumatic Tube



**AN AIR FILLED MOTORCYCLE TUBE POSSESSING
VERY UNUSUAL FEATURES:**

First: It withstands a tread puncture without de-
flating the tube.

Second: The higher the pressure the tighter the
puncture closes.

Third: It eliminates the risk of destroying cas-
ings by reason of punctures.

Fourth: The danger of loss of control of machine
is removed.

Fifth: It assures you of not being obliged to re-
pair a puncture on the road and gets you "there and
back" on full tires.

AIR FILLED ONLY

Punctures are self-closing by reason of a scientific
but simple principle of construction.

**NO "DOPE," GUM, PASTE OR OTHER
STUFFING MATERIALS.**

Write for prices, full description and sectional
sample.

VOORHEES RUBBER MFG. CO.

Sole Manufacturers

Main Office and Works
18 to 46 Bostwick Ave.

JERSEY CITY, N. J., U. S. A.

NEW YORK STORE
38 Vesey Street

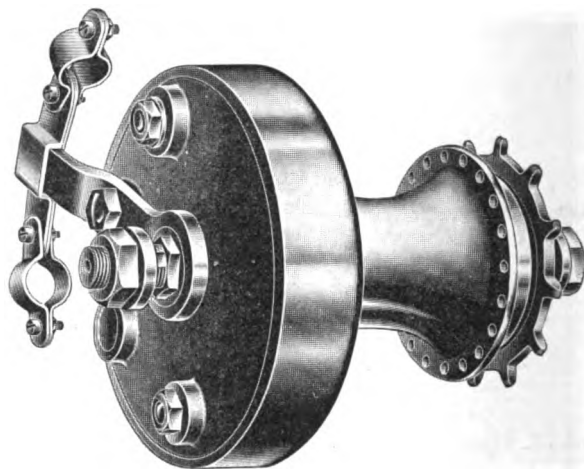
BOSTON STORE
280 Columbus Ave

ANNOUNCEMENT

A Motorcycle Coaster Brake That Is Strong Enough to Hold an Automobile

For some time past the motorcycle trade has felt the need of a coaster and braking device of sufficient power, strength and efficiency to give the rider control of high-powered machines.

The 1913 New Departure will do this and then some. It doesn't require much effort by the average rider to exert a back-peddalling pressure of 75 pounds. In this new model such a pressure will give A BRAKING FORCE OF

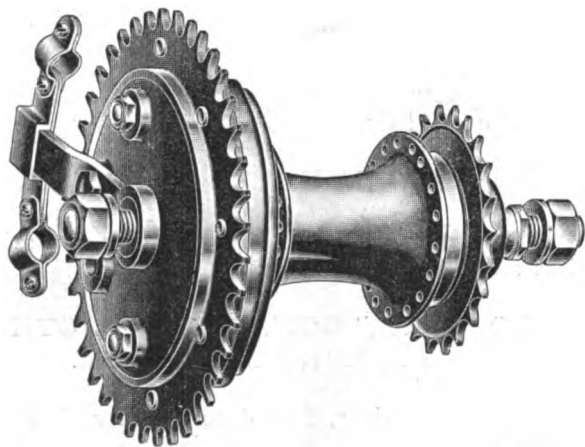


MODEL L
1913 New Departure Motorcycle
Coaster Brake for Belt Drive Machines

ONE AND ONE HALF TONS in the rear hub—a power sufficient to stop an automobile.

The action is positive. There is no possibility of locking. The mechanism is heavy—stronger than necessary.

Every motorcycle expert who has seen it says it is the ideal brake—just what rider and manufacturer have been waiting for. Fully described in new catalog, send for your copy today.



MODEL LL
1913 Model New Departure Motorcycle
Coaster Brake for Chain Drive Machines

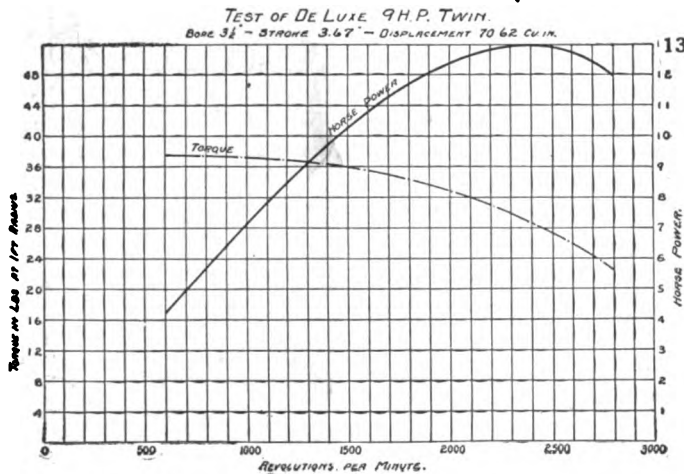
The New Departure Mfg. Co., Bristol, Conn.

COASTER BRAKE LICENSORS



POWER That's what converts the sport from work into pleasure. The Eagle soars high above the less powerful machines. A careful study of the power chart shows why. The Plenty of It gasoline does something when used in the Eagle. Perfect valve action made possible with the profile cam gives that even explosion, uniform power, and high torque at low speed. The great power of

The Eagle "9"



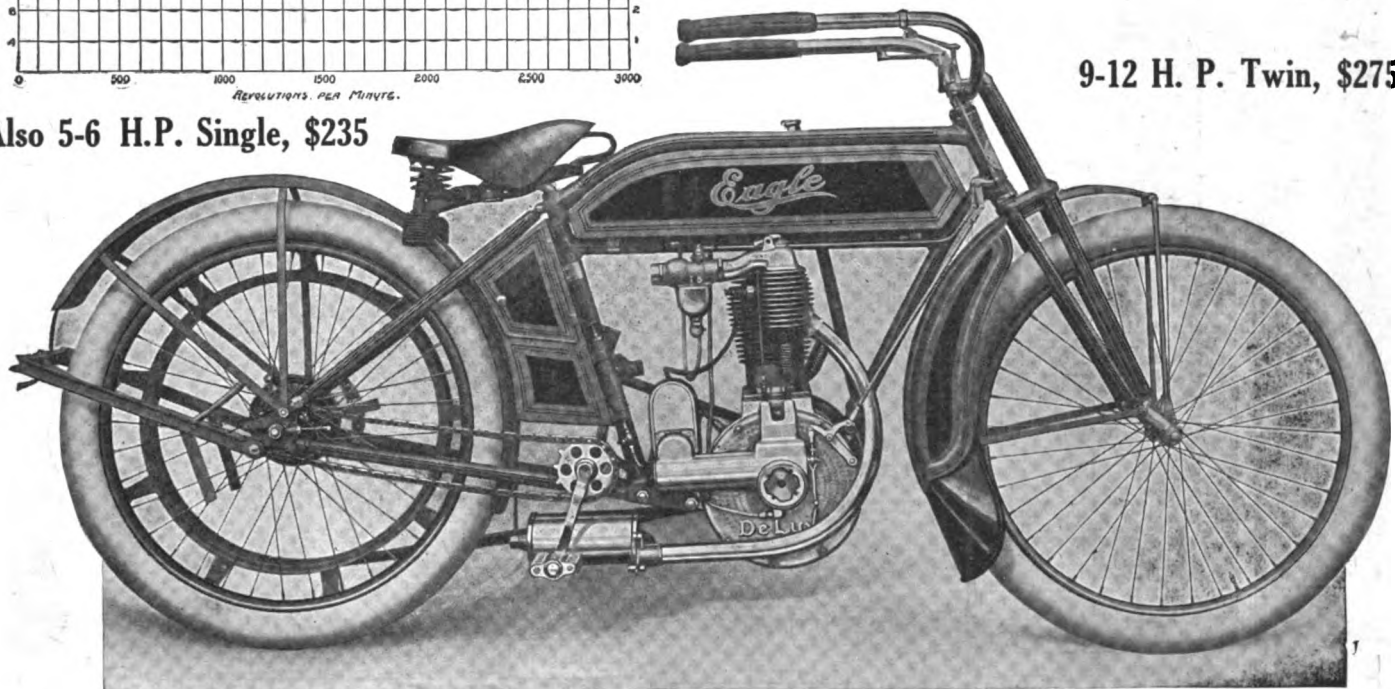
gives all the speed you want without fuss with a quarter throttle on level roads, and half open, climbs most any hill. You don't feel as if it was tearing itself to pieces. You know while riding that the easy jog of the motor insures long life to the whole machine.

AGENTS—Don't be misled. Power is what the boys want and ought to have.

Write for 1913 agency proposition.

Also 5-6 H.P. Single, \$235

9-12 H. P. Twin, \$275



Built by

American Motor Co.

716 Center Street

Brockton, Mass.

Write nearest Distributor or Factory for full information

GEORGE P. JENKINS.....	256 West 55th St., New York City
AMERICAN MOTOR CO.....	2724 Michigan Ave., Chicago
CALIFORNIA MOTORCYCLE CO.....	818 South Main St., Los Angeles
AMERICAN MOTOR CO. OF TEXAS.....	Dallas, Texas
D. W. POLKINGHORN.....	Charokoe, Iowa
ANDREWS & GAERTNER.....	108 12th St., Portland, Oregon
BERTELSON-ZABEL & CO.....	La Moure, N. Dak.
SCANLAN & RICHARDS.....	Bradley, S. Dak.
GEORGE H. LLOYD.....	2427 South State St., Syracuse, N. Y.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

We Want the Chain!

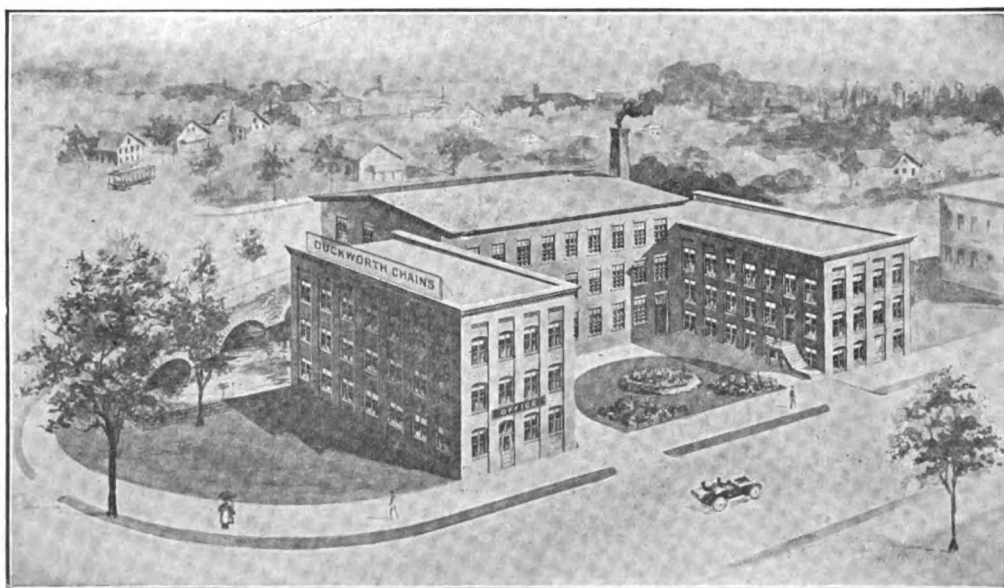
Never before in the history of motorcycling has the demand been so strong, so consistent, so universal, for the CHAIN DRIVE as it is to-day. And never before have the leading manufacturers so completely capitulated to this demand.

Read their announcements. See for yourself the practically unanimous adoption of the chain drive as the TRANSMISSION FOR 1913.

In particular, read the INDIAN announcement. Thirty-five thousand chain-driven motorcycles for 1913!

"DUCKWORTH"

chains are used by all the leading motorcycle manufacturers, because they are unequalled in quality and efficiency.



This picture shows the completed plant of the Duckworth Chain and Mfg. Co. The large addition at the left has a floor area of 7,500 sq. ft. and its erection was an imperative necessity to assist in increasing the output of "Duckworth" chains. This is certainly one of the many indications of the public's preference for the chain transmission in general, and Duckworth chains in particular.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Economical tire buying is simple—all there is to it is to see that you get the *most* in service and satisfaction.

Almost any tire will give ordinary service, but ability to deliver maximum mileage has a vital bearing on ultimate cost.

Shrewd motorcyclists find that the matter of satisfactory tire service hinges entirely on tire quality.

Discriminating in the selection of tires is real economy—it results in longer wear without added cost.

FEDERAL TIRES

The Tires of "Extra Service"

Federal Tires are the kind that last a long time—durability is the leading feature about them. They are extremely well made of the finest and most carefully selected materials. Every Federal Tire has *extra* service built into it. For the sake of comparison, try them.

Federal Tires are made in Corrugated and Studded treads in all sizes and in single and double clinch types. They are supplied through leading dealers everywhere. Interesting tire book mailed on request.

Federal Rubber Manufacturing Co. Milwaukee

Branches and Agencies—New York, Boston, Chicago, Kansas City, Minneapolis,
Denver, Indianapolis, Columbus, St. Louis, Louisville, Omaha,
Little Rock, Atlanta, Los Angeles, San Diego, Pasadena,
New Orleans, Portland, Federal Rubber Mfg. Co. of
Texas—Dallas, Houston, San Antonio.

DeLuxe

DeLuxe

ATTENTION Motorcycle Dealers

Do you want satisfied customers?
If so

Sell Them DeLuxe Motor Equipped Motorcycles

They are now offered by many prominent motorcycle manufacturers.
They are the **LAST WORD** in motor perfection.

Prepare for the 1913 Demand.

THE F. W. SPACKE MACHINE CO.
Indianapolis, Ind.

MANUFACTURERS OF THE
Silent Powerful
Fast Clean

DeLuxe
Motors

DeLuxe

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WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubes, handle bars, seat posts, exhaust tubes and straight lengths of tubing. The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

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**“The First
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St in Power Speed Endurance

For hill-climbing, for racing, for side-car work, for every use to which a motorcycle can be put, the R-S has time and again demonstrated its undeniable superiority.

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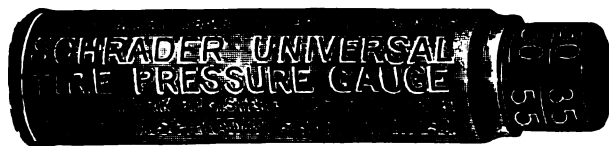
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delays, difficulties and expense resulting from these misfortunes?

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(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

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KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

Low Cost
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Long Wearing } **TIRES**

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Snow and Ice Mean Double the Wear on Tires

That is one of the reasons why

Diamond MOTORCYCLE TIRES

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for winter.

Your safety often depends on
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your tire will not prevent it.

Ice and frozen mud will tear
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to meet such conditions is
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cycle tires.

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than Diamond tires but you
cannot buy better ones.

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Make your ignition system com-
pletely reliable—with the Bosch
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"The Wise Distribution of Parts the Secret of Success."—Bacon.

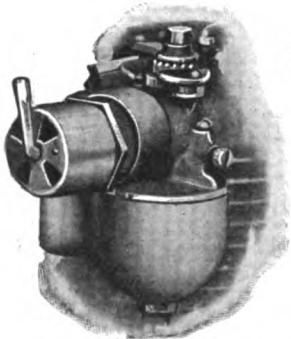
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F & S Annular Ball Bearings

AND

The Bowden Patent Wire Mechanism

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Clark Motorcycle Starter

A NEAT and compact attachment for the carburetor, that starts the engine without excessive pedaling, reduces carburetor trouble fifty per cent and cuts down the gasoline bill. A gasoline engine requires a richer mixture to start on than is needed after it is warmed up. Without the Clark Starter, it is necessary to open the needle valve more than is required to give efficient results after the engine is warmed up. [Price, 75c. each]

Clark Acetylene Tank Brackets

Model "A" designed specially for Excelsior Motorcycles, fastens to the handle bar in a rigid position and does not allow the slightest movement or vibration of tank.

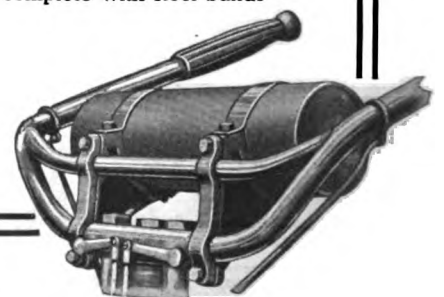
In setting tank into the brackets, an eccentric arm is pressed down and holds tank solid. No screws or bolts to tighten or loosen. Tank can be removed in a second by releasing eccentric arm. The tank in this position does not interfere with any other attachment on the machine. Furnished complete with steel bands and necessary bolts for attaching. State Model of Motorcycle when ordering.

Price, Highly Polished Nickel Plate, \$2.00 per pair

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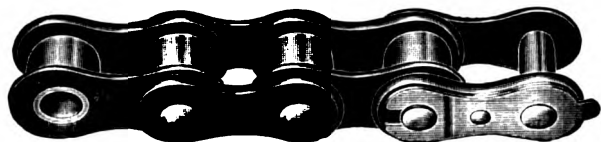
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When making replacements insist on a "Whitney" and get acquainted with its merits.

The Whitney Mfg. Co.
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DIFFERENT motorcycles need different lubricating oils.

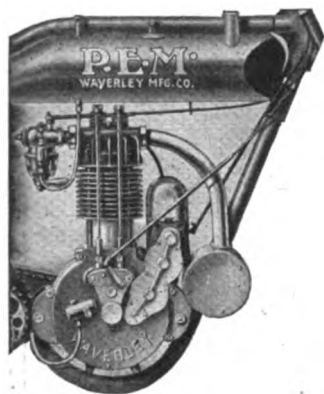
Some one of the several grades of Gargoyle Mobiloil will get the greatest efficiency from your motorcycle.

Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

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Distributing warehouses in the principal cities of the world.



Our New 1913 Models

Without doubt the new 1913 P. E. M. will be the classiest—snappiest—fastest and sportiest motorcycle on the road or track next year. The man who is looking at a machine for himself—the dealer or agent who wants to push a winner will be doing himself a big favor when he writes for full specifications, prices and terms on these new machines. Just watch our 1913 record.

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Fabric Supplies. Comprising our line are Leggings, Puttees, Tool Bags, Tool Rolls, Luggage Carriers, Inner Tube Bags, Motorcycle Covers, Magnet Covers, Tire Covers, Wind Shields, etc., all built up to the Nathan standard, QUALITY.

Don't fail to send for our booklet.

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Adds more pleasure to the sport. Registers accurately both total and trip mileage; miles in white, tenths of miles in red.

Specially constructed to withstand hard motorcycle usage

Easily adjusted to any motorcycle. Made for 24, 26, 28 and 30-in. wheels.



Sold everywhere—or write us

Price complete with bracket and striker \$3.00

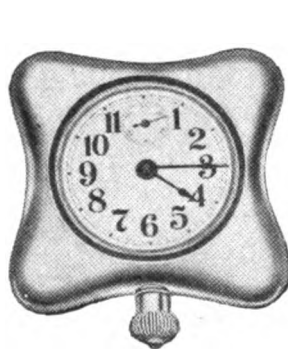
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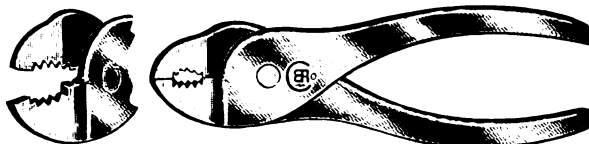
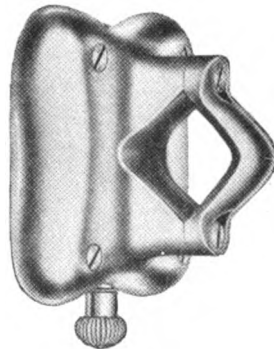
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The Volume of Our Business Insures Prompt Service—Reliable Goods

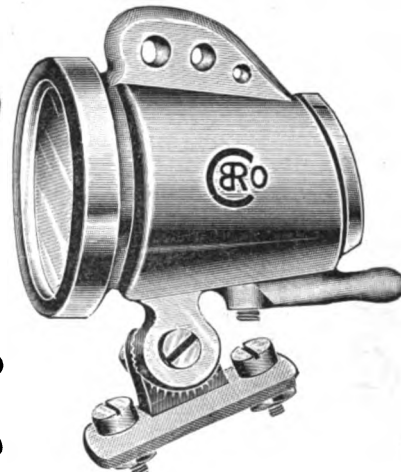
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Casings
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CLOVER LEAF M. C. CLOCK.....List, \$3.50



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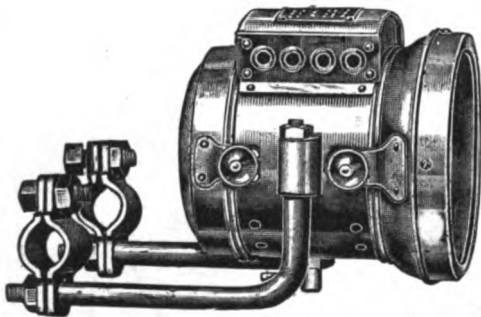
REAR GUARD TAIL LAMP...List, \$1.50

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If you are an established Dealer ask for Catalog Thirty

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MICHIGAN AVE.=RANDOLPH ST.



MOTORCYCLE SEARCHLIGHT No. 102
Showing Back Closed

Stock Up Now

With the Lamps of "Old Reliable" Quality

20th Century Lamps

MOTORCYCLE AND BICYCLE

Whose popularity and saleable qualities demonstrate that the public want the *best* in lamps. They are recognized as the searchlights with long range power, which throw concentrated rays *directly ahead* where the danger lurks, and they **ARE GROWING GREATLY IN DEMAND** because they afford the utmost in lighting efficiency and protection. Unequaled for quality of workmanship and strength of construction. Over twenty years' experience in lamp building guarantees their excellence. Note "open-door-to-lens" feature in Motorcycle Model No. 102 for easy cleaning purposes.

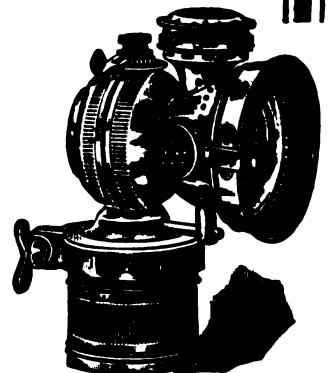
The 20th Century line of Bicycle Lamps are as popular as their motorcycle partners. We will have a very large sale for them in 1913. 20th Century generators are the best in the market. Special non-corroding and non-tightening locking device.

VERY FAVORABLE TERMS TO JOBBERS. Dealers, write us if your jobber doesn't stock 20th Century Lamps

20th Century Mfg Co

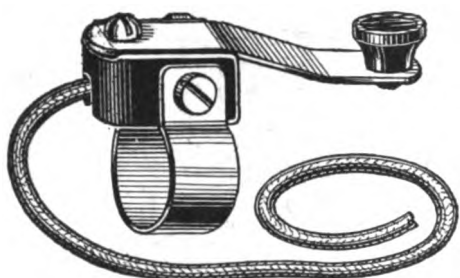
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IMMEDIATE
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BICYCLE No. 2
Combined Lamp and Generator

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DON'T TAKE CHANCES!

Don't depend solely upon your delicate grip control mechanism. If it should refuse to work at a critical moment, — there'd be trouble. Get a

SIMPLEX MAGNETO CUT-OUT

Price 50c, or complete with cable, 75c. By mail, postpaid. We also make the celebrated Simplex Side Cars. Let us send you our booklet

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MOTOCYCLES
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New unbreakable shaft casing
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 Nickel steel gears
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Our instruments are used by the motorcycle squads of 26 police departments

STANDARD THERMOMETER CO.
65 Shirley Street Boston, Mass.

STANDARD BEARINGS



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Enemies of Friction

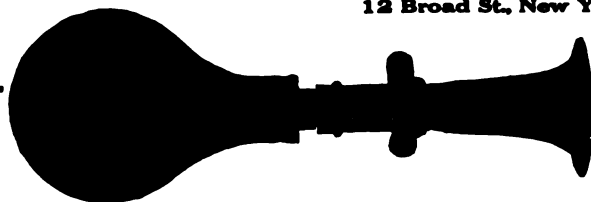
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STANDARD ROLLER BEARING CO.
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You Should Catalog the Acme Siren

The Jobbers and Dealers who are now making up their 1913 catalogs should write for electrotypes of "the little horn with the enormous range."

Sarco Engineering Co.
12 Broad St., New York



Gasoline Gauges For All Motorcycles

\$1.50 postpaid. Give depth of tank.

Circulars on request.

WEISS MFG. CO.
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Whipple Special Bargains

1912 Thor White, 5, \$175; racing Thor, 4, very fast [from Riverview track], \$100; 1912 four-cylinder Pierce, \$250; 1910 four-cylinder Pierce, \$175; 1912 Harley-Davidson, \$175; six h.p. Thor Twin, [magneto], cost \$300. \$140; 1911, spring frame, Greyhound, cost \$225, \$100. All above machines in excellent condition; mostly late new ones; slightly used; many others down to \$25.

WHIPPLE, The Motorcycle Man
Whipple Motorcycle Bldg. 1227 W. Jackson Blvd.

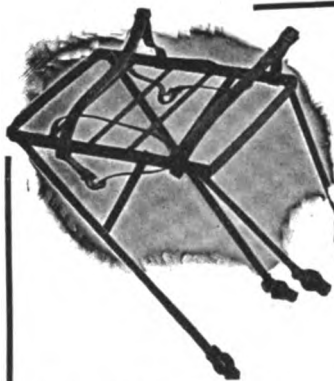
Dealers! Riders!

Here's the ideal luggage carrier. Built scientifically—can withstand considerably over two hundred pounds weight. Just the thing for tandem riding. Adjustable to all motorcycles.

The "Star" Luggage Carrier

Is sold by the leading jobbers in the country. Write for our catalog.

Star Electric Co., 18 No. May St., Chicago, Ill.



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NEW A Clearing House For Motorcycle Supplies

Up-to-date banks send their checks to clearing houses for exchange so they will not have to send them all over the country.

Wise Motorcyclists send to us for supplies so they will not have the expense and trouble of buying one thing here and another there. You can buy any good accessory from us and won't have to pay any more—often not as much. Besides, you can return any article at our expense if it does not please you in every way.

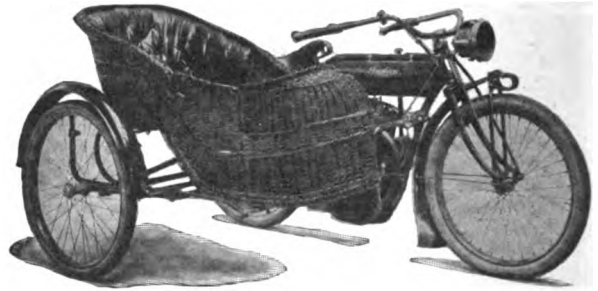
MECO Means
Guaranteed

If you want complete shipments made same day the order is received, on your money back plan, send to us and you will get

**What You Want
When You Want It**

We are the only clearing house for supplies because others' stock is not as complete. Our big catalog tells all about our \$20,000 stock of 773 different supplies. Write for it today.

MOTORCYCLE EQUIPMENT COMPANY
Hammondsport, N. Y.



The Baxter Side Car

Strong—Because of its re-enforced frame-work, its solid Bessemer steel hub spindles, its scientific construction throughout.

Light—Weight is less by 20 lbs. than that of any other side car made. This is due to the proper distribution of weights.

Comfortable—Its deep leather cushions and its patented tension spring wheel tend to make the Baxter Side Car the acme of comfort.

Dealers write for our 1913 proposition

Prices \$60 and up

SHOWROOMS, 2304 BROADWAY, N. Y.

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The *Neverout* Gas Lighting TRADE MARK Outfit FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

ROSE MANUFACTURING COMPANY

933 Arch Street, Philadelphia, U. S. A.



Now that Election is over,
Let's get down to business.

We have the best motorcycle plug
on the market and would like to
start you right.

Let us demonstrate this with the
Auburn Spark Plug

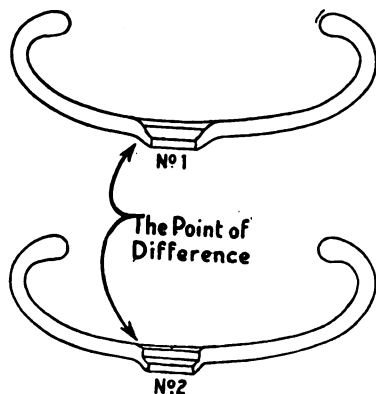
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Money.

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Mott Rims for Strength

THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

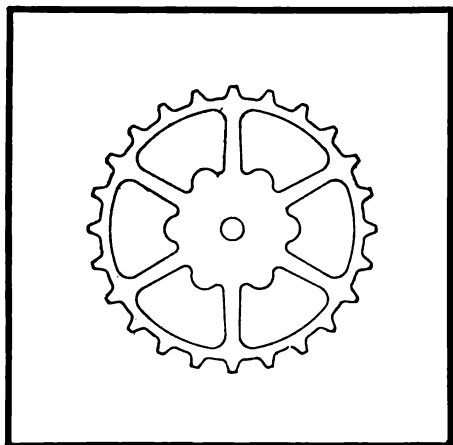
WRITE US FOR FULL DETAILS

THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

MOTT WHEEL WORKS, Utica, N. Y., Manufacturers

R. B. ABBOTT SALES CO., Sales Agents, Majestic Bldg., Detroit

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Hydraulic Pressed Steel Co.

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Motorcycle
IMMEDIATE



Specialties
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Simplex Spring Tandem Attachments
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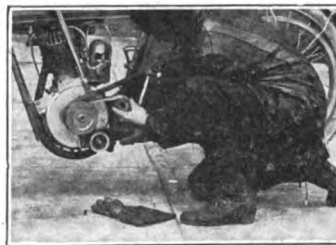
A-K New Type Luggage Carriers
A-K Side and Stand Extensions
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A-K Spring Luggage Carriers
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MAKERS OF
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CHICAGO

ARE you troubled with belt slipping, Mr. Rider? Do the screws in your lagging cut grooves in your belt? We can overcome this for you, also prevent your belt from getting glossy. The only cure today is



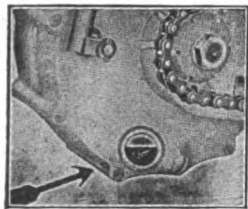
**ABESTO
PULL-E-TAPE**

Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape. 50c per Roll—send for some today and save your belt. State width.

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150 EAST EXCHANGE STREET

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Patent Applied for.

Let Us Send You This Sight Glass Oil Gauge

—AT OUR EXPENSE—

Mr. Harley-Davidson rider! Mr. Excelsior rider, and all the other riders that have no oil gauge on the crankcase of their engine! We have so much faith in our oil glass that we wish to send it to you at our expense so that you can see it yourself—and then you can decide whether you want one or not. We want you to see the finest crankcase gauge ever put on a motorcycle, a gauge that will show you EXACTLY how much oil you have in your engine ALL THE TIME, and will do what no other one will—IT WILL KEEP CLEAN.

The Gauge is handsomely nickel plated, an ornament to any machine, the size of a thin watch, only $\frac{3}{8}$ of an inch thick. It screws firmly on the crankcase, is out of the way and won't jar or get knocked off. It will save its cost in oil in a few weeks. It will keep your plugs from fouling. After you have used it a week you would as soon be without your watch. It can be attached in ten minutes with the tools furnished. Do you know that if you have the right amount of oil in your engine you can start easily in the coldest weather?

We Have Lots of Letters Like This

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Gentlemen:—I am pleased to say that your Simplex Oil Gauge is giving splendid results on my Excelsior 7-horsepower twin, as it shows the oil level at all times and prevents overoiling and fouling plugs. A careful rider should not be without one. Very truly yours, H. C. BROADWELL, Security Bldg., St. Louis.

BUCK SALES COMPANY, 211 North 12th Street, ST. LOUIS, MO.

The Buck Sales Company, 211 North 12th Street, St. Louis, Mo.
Gentlemen: Please send me, without charge or obligation on my part, one of your Simplex oil gauges for.....
Motorcycle. If I decide to keep it I will pay the regular price, \$1.50, without cost to me.
Name
P. O. Address
Dealer's name

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To Be Well Dressed

is not an indication of vanity. It is your duty to yourself and to your friends to look well.

Clothes that fit well always look well and wear well.

When you

**BUY
AURORA**

MOTORCYCLE  **CLOTHING**
BRAND

you buy clothing with

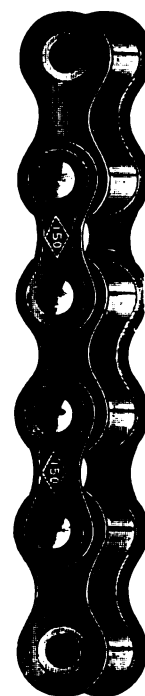
**Strength in Every Fibre
Quality in Every Thread**

Made in English Roseberry, English Whipcord, ~~Pontian~~, Petrels and Khaki.

Dealers, investigate our proposition

Fowler-Carnes Company
Aurora, Ill.

"We have used Diamond Chains exclusively for starting chains on the Wagner Motorcyclo for the past six years. Always most satisfactory."



Testimony like this from such a well-known firm as the Wagner Motorcycle Co. should be more convincing than all we can say about the high grade material and exceptional machining that goes into every part of a Diamond Chain.

Twenty-one years of supremacy makes Diamond Chains worth all the praise they get. Look for the Diamond trade mark on the connecting link when you buy a new chain.

TRADE  MARK

Diamond Chain & Mfg. Co.
227 W. GEORGIA STREET, INDIANAPOLIS, IND.

Capacity 8,000,000 feet per year.
SAMPLES SUBMITTED.



121

Keep your feet always on the Pedals



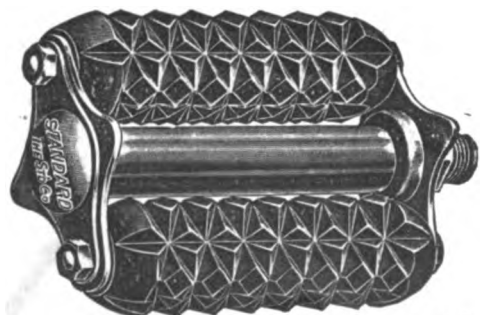
The deep rubber corrugations in the big cushions on

STANDARD PEDALS

keep the feet in the proper position. When going over rough roads, the constant jarring and bumping makes it very uncomfortable for the rider who cannot make his feet stay "put"—not to mention the fact that he cannot readily use his brake.

STANDARD PEDALS insure the utmost comfort for the feet. They have been in consistent use by the majority of motorcycle manufacturers for many years, and you can have them on your motorcycle if you insist on Standard Pedals.

Dealers—send for electrotypes and description of our line. It is well worth handling.



THE STANDARD COMPANY
TORRINGTON, CONN.

Jeffery-Dewitt Porcelain Triumphs Again

¶ It takes a hammer to crack a J-D Porcelain. Heat can't do it. Every claim to the superiority of this product has been vindicated—and more—by a new experience. A great motor car factory burned to the ground on the first day of last June. It was the fiercest conflagration ever recorded in the automobile industry. Heavy brick walls crumbled like cardboard; steel rails twisted and curled like glowing serpents along the ground; immense steel girders bent and writhed in the flame; piles of aluminum castings melted into a white hot pool. When the fire had burned itself out, nothing remained but the smoking wreckage of a plant and stock worth half a million.



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¶ Every motor had been equipped with J-D Spark Plugs. Not a single Porcelain was cracked!

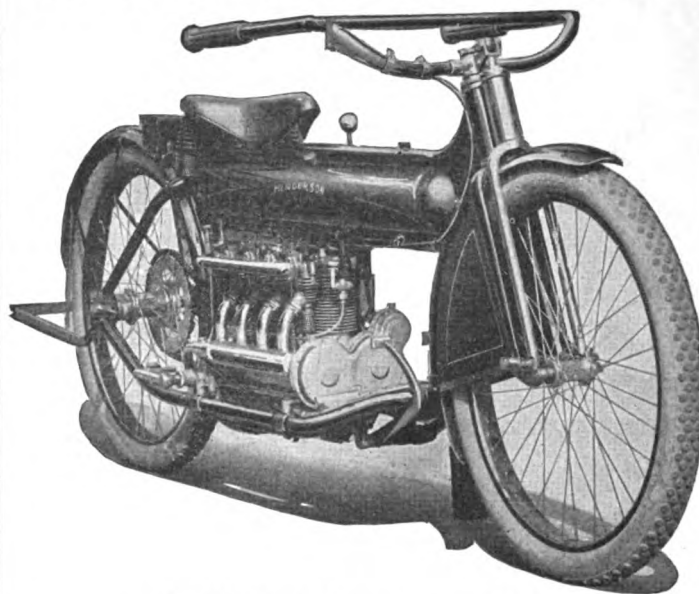
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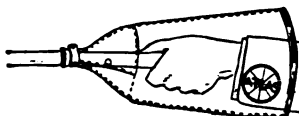
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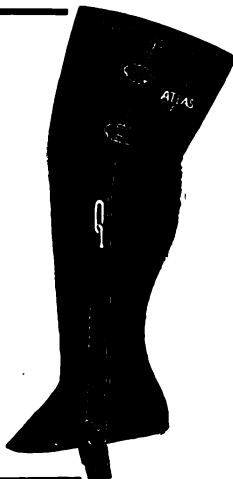
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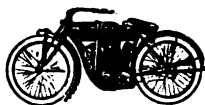
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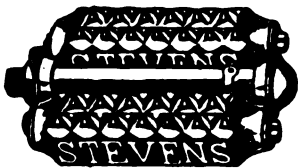
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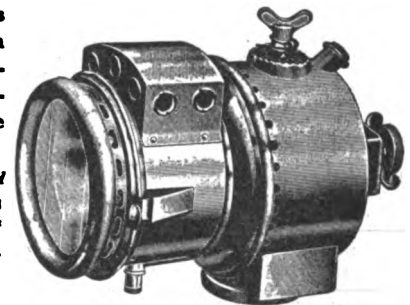
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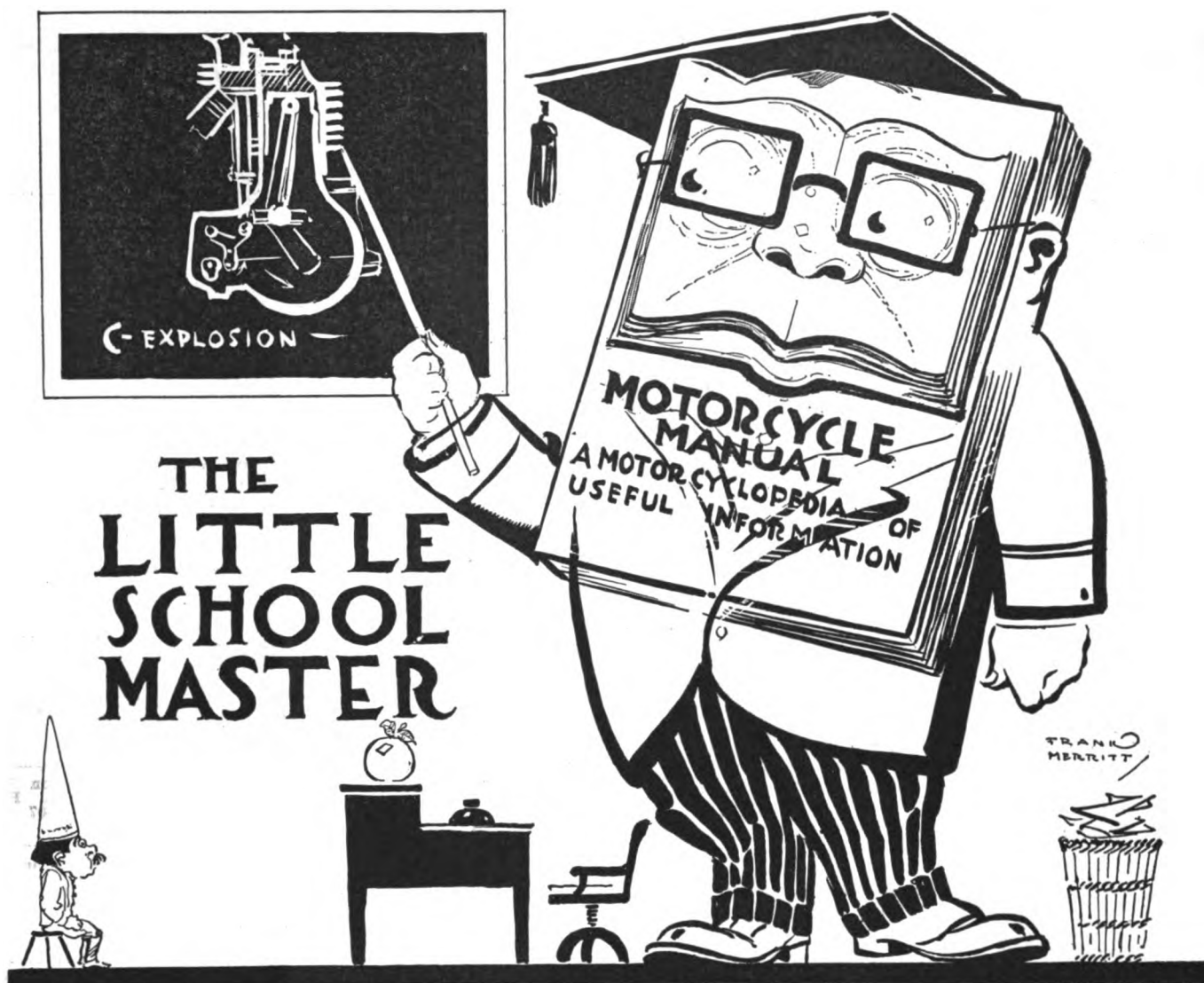
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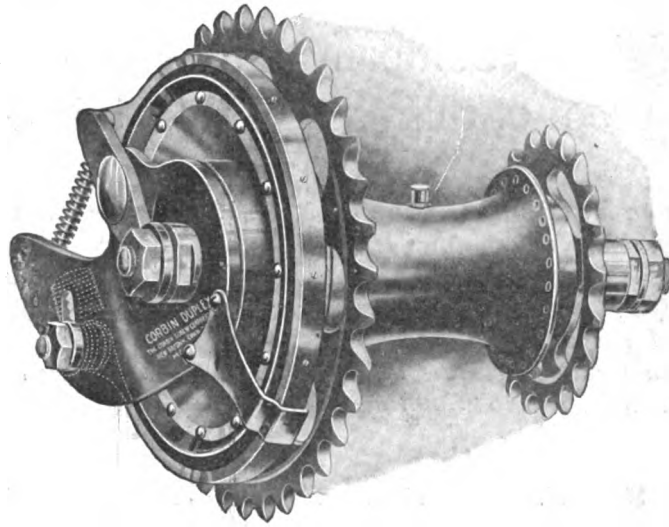
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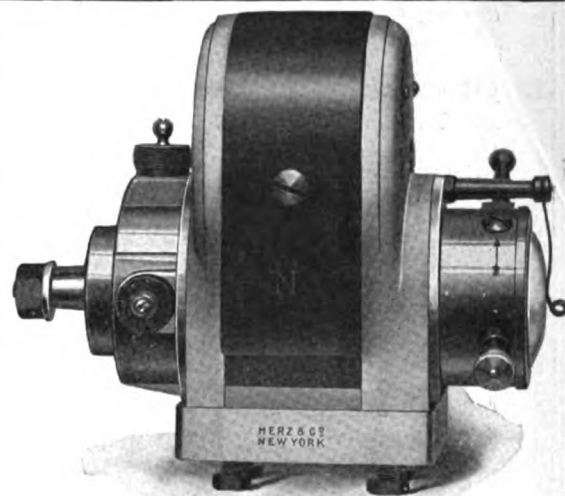
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A gas generator, besides being a troublesome nuisance, is not reliable. Small generator lamps are too feeble.

Prest-O-Lite floods the road far ahead with brilliant light—shows up the bumps, ruts and puddles.

The flame neither flares up nor dies down—it is **STEADY** under all conditions. Turned on and off like a gas jet.

Prest-O-Lite Owners



Paul C. Stallpomp, 205 West First St., Delphos, Indiana, finds his Prest-O-Lite Motorcycle makes night riding pleasant and safe. It is the light that never fails.

Prest-O-Lite Motorcycle Gas Tank

Exchange service wherever you may be is provided by over 20,000 dealers (motorcycle and automobile). We will arrange prompt service for anyone, anywhere.

You Can Easily Afford It

Prest-O-Lite service costs no more—usually costs less—than the carbide a generator consumes.

Price of Tank \$10

(Equipped with Gauge)



Dimensions: Length, 13¼ inches; diameter, 4 inches; weight, 8¾ pounds. 40 hours of light. Easily attached to any motorcycle.

The money you invest in the tank itself is not **SPENT**, because a genuine Prest-O-Lite Tank never gets to be second-hand, is always in demand, and is always a **READY CASH ASSET**.

In fact, no rider can afford to be without this combined **CONVENIENCE**, **PLEASURE** and **INSURANCE**. One accident due to poor light might cost you more than years of Prest-O-Lite service.

Don't Let Anyone Cheat You With an Imitation

The genuine Prest-O-Lite Tank, when empty, can be immediately exchanged for a full one, **ANYWHERE** and **ALWAYS**. Imitations cannot.

The dealer who slips on a counterfeit in exchange for your Prest-O-Lite Tank gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us. Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Read the label.

The Prest-O-Lite Co. 246 E. South St. INDIANAPOLIS, IND.

Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

M.. Dealer: In this one ad alone there are plenty of reasons why you ought to be pushing the Prest-O-Lite Tank, for your customer's sake as well as your own.

And, if you want to retain your customer's trade on other things, don't get him into the habit of going elsewhere for his Prest-O-Lite exchange.



We're Still Laughing !

BUT, MIXED WITH THIS huge amusement is a fair share of amazement at the policy adopted by belt manufacturers in their desperate efforts to retain their fast "slipping" grip on the transmission business in America. By attacking the chain transmission they have laid themselves open to retaliation.

THE BELT IS A remnant of the dark ages of motorcycling—when the general unreliability of the machine itself dwarfed into practical insignificance the poor work of the belt. But, under the glaring noonday light of mechanical perfection which the motorcycle of today has attained, the belt's faults have been mercilessly exposed. Its constant stretching when under strain, the necessity of aids of various kinds, its general all-around inadequacy has done a great deal to annul the gigantic strides made by the motorcycle toward absolute mechanical perfection.

THE BELT IS NOT a good transmission because it is unreliable. It slips at a critical moment. It is not prepared to withstand an excessive strain. On hills, the friction caused by the belt's slippage frequently forces the rider to stop in order to permit the belt pulley to cool off. So terrific is the heat occasioned by this friction that oftentimes the "dressing" begins to bubble and the belt literally "fries" in oil.

TO MAINTAIN EVEN ITS low standard of efficiency, the belt requires aids of various kinds, as, for instance, "pulley lagging," which is a strip of adhesive tape which must be wrapped around the pulley and which must be renewed every so often. Even the veriest novice can appreciate how radically wrong is the idler—what excessive friction is occasioned when the idler is employed.

WHEN THE BELT IS exposed to water, it softens and the small stones, grit, gravel, etc., thrown up by the tires imbed themselves in the belt. After the belt dries, it hardens, loses practically all its flexibility and the foreign particles remain therein, frequently severely scoring both the pulley and the belt rim on the rear wheel.

EXCUSE US A MINUTE—we have to laugh again. Picture to yourself a rider discarding a transmission for the sole reason that lubricating it gets his hands dirty. Of course the average rider of a motorcycle wears white kid gloves and just positively hates to get them soiled!

YOU'LL NOTICE WE ARE not saying anything about the chain. We don't have to. The strongest argument that can possibly be put forth is the fact that the engineering experience, brains, acute mechanical knowledge and farsightedness of the leading motorcycle manufacturers of America and abroad have decreed the chain to be the transmission best fitted to do justice to their output. While it is true that the rider's wishes are to be considered, it seems to us that the decision of men trained to recognize and seize upon what is mechanically correct should hold stronger weight with the rider and prospective rider than the claims and protestations of manufacturers whose opinions are **very much** biased.

Ha! Ha!

Sarco Engineering Co. 116 Broad St., N. Y.

U. S. Agents for "The Coventry" Chains

These Links are in all "The Coventry" Chains

Built into every one of "The Coventry" Chains are the three qualities which have made them famous—

Strength

"The Coventry" Chains must withstand an actual strain equal to 3600 pounds before they leave the factory. No strain put upon them by any motorcycle motor—no matter how powerful—can make them break or give in any way.

Speed

"The Coventry" Chains have been the standard equipment of the majority of victorious European riders. Twice in succession they won the Tourist Trophy races in England—the Circuit de Fontainebleau in France and other notable events.

Endurance

This can be gained only by conscientious manufacturing methods and rigid inspections. In "The Coventry" Plant, not one of the 1200 operations each chain undergoes is passed without a close inspection. The carefully selected bar and strip steel, the perfectly tempered bronze bushings—all are combined in making "the chain with the nose" a triumph of the chain maker's art—the ultimate aim of which is PERFECT SERVICE.

Write for our catalog.

Sarco Engineering Co.
112 Broad Street, New York



STRENGTH

SPEED

ENDURANCE



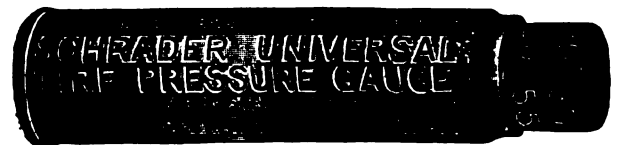
Have You Had Trouble With Your Tires?

A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

Schrader Universal Tire Pressure Gauge



(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

A. SCHRADER'S SON, Inc.
28-30-32-33 Rose Street NEW YORK CITY

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

The Thor Motorcycle

is easily recognized by the exclusive features found only in the Thor.

Originality of design makes the Thor Motorcycle foremost and proves its individual distinction.

It is a well-known fact that we are the producers of the first successful motor to be installed in a motorcycle, in this or any other country; the Thor is built for endurance, and a better motorcycle cannot be made.



In the past thirteen years we have built many hundreds of motors for other manufacturers to embody in their make of motorcycles, who have enjoyed the privilege of name and fame through our efforts, experience and product—the Thor and fittings.

We can make immediate deliveries on our 1913 Model, 13-M Single Cylinder, Four Horsepower. Quick action by progressive dealers will secure unallotted territory.

Write for Our Advance Booklet

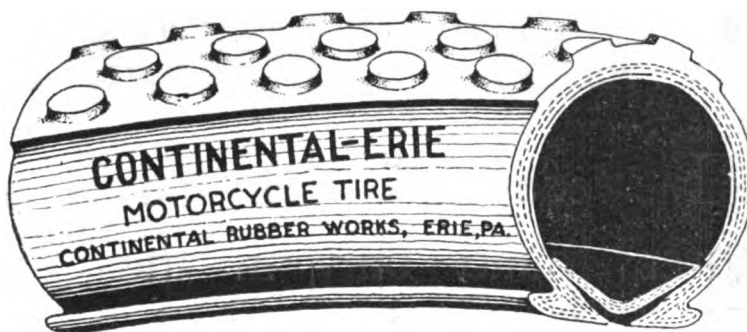
Aurora Automatic Machinery Company

General Offices: Thor Building, 1307 Michigan Avenue, CHICAGO, ILL.

Works: AURORA, ILL.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

**Continental-
Erie
Tires**



**"They're
Built
to Last"**

LIFE!

THE tire that gives the longest **efficient** service is the tire for **you**. Continental-Erie tires are made in but one tread—the studded—and the attention which would otherwise be divided among different molds is concentrated on the perfection of the studded tread. Years of experience have taught us the superiority of the studded tread for hard service. The studs grip the road and only when they're entirely worn off does the actual wear on the tire begin.

Add carefully selected, high grade materials and conscientious, concentrated manufacturing methods to the undoubted advantages of the studded tread, and you have the **ideal** tire in point of **efficient service**—the Continental-Erie.

CONTINENTAL RUBBER WORKS - - Erie, Pa.

Strength

The Emblems of 1908-09-10-11-12 have conclusively demonstrated their speed, their service, their comfort, their all-around efficiency to the satisfaction of every user. Just as the 1913

Speed

Models
4 H. P. Single
Battery Ignition
\$175

EMBLEM

will convince every one of its riders that we have sustained our reputation for making each succeeding EMBLEM better in every way than the one before. The EMBLEM line for 1913 embraces a new-comer, the EMBLEM "Ten." For tremendous power, speed and vibrationless strength, this new model holds a position all its own.

Let us tell you more about it

Emblem Mfg. Co., Angola, N. Y.

DISTRIBUTORS:
For California—John T. Bill & Co., Los Angeles.
For the South—Henry Kiedel & Co., Baltimore, Md.
For Oregon and Washington—Ballou & Wright, Portland, Ore.
For Chicago—Brown Music Co., South Chicago, Ill.

7 H. P. Twin
\$250
10 H. P. Twin
\$300

Durability

Comfort

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

THE POWERFUL

QUICK IGNITION

DIRECT THRUST

POSITIVE EXHAUST

Pope
"Big 4"

Why Mechanically Operated
OVERHEAD VALVES

Produce More Power

The chief advantages of overhead valves in a motorcycle engine of the Pope "Big 4" type are quick ignition, direct thrust, and positive exhaust. Great power and efficiency are the logical results.

QUICK IGNITION Ignition is quick in the Pope "Big 4" engine, as it always is in a properly designed motor with overhead valves. This is because the gas is admitted directly to the compression chamber without turning any corners as it does in an "L" or a "T" shaped cylinder. The spark fires directly into the mixture as it enters.

DIRECT THRUST When the explosion occurs the power impulse coming with full force directly down on the piston from above produces what is known as a "direct thrust." No energy is lost as there is when the explosion occurs offside.

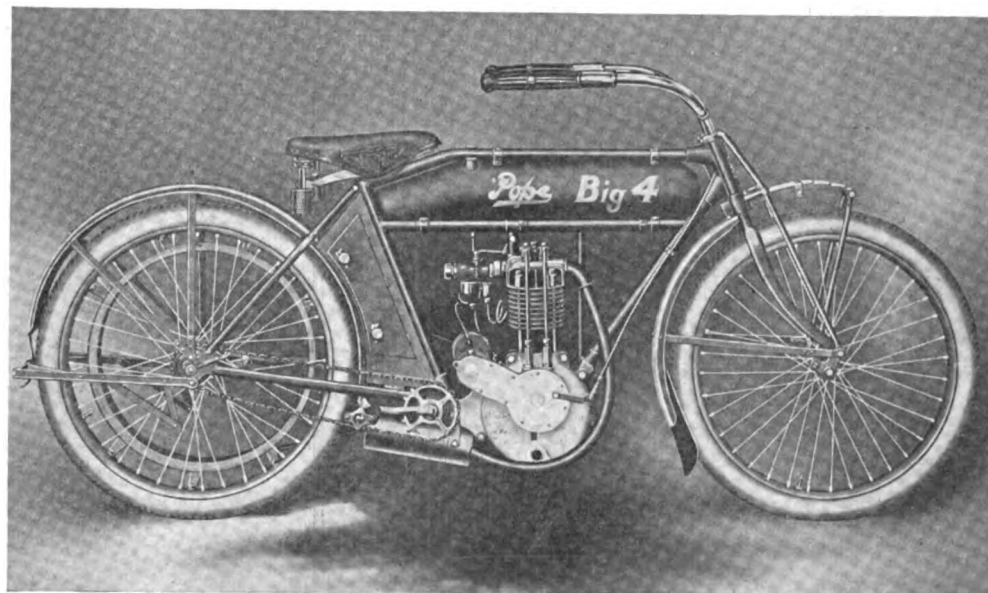
POSITIVE EXHAUST The exhaust stroke is positive in a Pope "Big 4" motor and the scavenging of the cylinder is complete. After the explosion, all burnt gases are expelled from the cylinder immediately. There are no pockets to sidetrack the exhaust or collect carbon. The cylinder walls present an unbroken surface.

ACCESSIBILITY The overhead valves of the Pope "Big 4" are located in the most accessible place.

Model K, "Big 4," \$200
(Magneto Equipped)

Model H, Lightweight, \$165
(Magneto Equipped)

Write Today for Catalog and Dealers' Terms.



MODEL K, POPE "BIG 4"

THE POPE MANUFACTURING COMPANY, HARTFORD, CONN.

F. P. KEENAN CO., PORTLAND, ORE., Northwest

PACIFIC COAST DISTRIBUTORS:

C. L. SMITH, LOS ANGELES, Southern California

KIMBALL-UPSON CO., SACRAMENTO, CAL., Northern California and Nevada



Time is Fleeting and Yale

ORDERS are booked right now (when this was written, November 23) for 137% of the total number of Yale Motorcycles that were sold in 1912. Although we have arranged to more than double our output, business is coming in such quantities that we will soon have contracts for all the machines we can build in 1913.

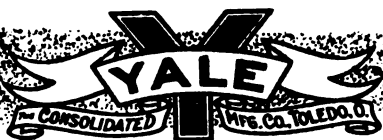
As soon as that point is reached, no more agents will be accepted! We will not close with agents that we cannot take care of thoroughly.

To get in on the good things that will come to Yale agents next season, speak quick. Be sure your contract is big enough to supply your needs all season, for we cannot guarantee any man a greater number of machines than his contract calls for.

THE CONSOLIDATED

1730 Fernwood Ave.,

Eastern Representative, F. C. CORNISH,



Agencies Wait for No Man

So many machines will be required to satisfy signed contracts that are already in—with cash deposits on every one—that there will be none to spare.

Now is the time to talk business. In just a short time it will be too late, for Yale territory is in great demand. Write us at once before the moment is past. Now is the appointed time.

Our national advertising will not cease when our output is contracted for. We will continue our tremendous \$125,000 campaign for the benefit of our agents—to sell Yale motorcycles for them.

MANUFACTURING CO.
TOLEDO, OHIO

219 Clinton Avenue, NEWARK, N. J.

SILENCE and

That form of transmission which runs day after day, without sound, best fulfills its mission in popularizing the motorcycle; that form in which the construction is simplest, and the repair, when necessary, most readily and rapidly effected without complicated parts, appeals to the present and prospective rider as the most desirable.

Silence

Two sounds, one pleasant and the other unpleasant, are inseparable from the operation of a motorcycle. These are: the noise of the tire on the road and the puff of the motor exhaust. The ideal motorcycle should run with no other sounds than these. Least of all should the transmission be noisy. There should be no whirr, rattle or clank evident; the drive should be essentially silent. With the belt-driven motorcycle alone is this true.

The belt, running over its pulleys, is silent. A flat belt is endless, and there are no metallic parts to strike and click. A V-belt may have a metallic coupling, but it does not strike the pulleys, and this form is equally silent.

A chain transmission, made up of numerous links and often working over badly worn sprockets, sets up a whirr or clank, deepening in intensity as wear occurs. If too slack, a chain slaps about, making further noise. For a quiet transmission, it is not to be compared with the belt.

An unusual note in the running of the machine betokens trouble. The more silent the transmission, the more readily can such a warning be detected. If the transmission is noisy, the danger note must be of greater intensity to be heard at all. If not heard, it is neglected. The result in either case is costly and often disastrous.

THE GRATON & KNIGHT

LEATHER TANNERS

Worcester,

Manufacturers of the famous **SPARTAN BELTS** efficient and economical, the

SIMPLICITY

Simplicity

Absence of complicated parts is most desirable in any motorcycle transmission. If all riders were skilled tool-makers or mechanical experts, the fitting of small parts of unusual shape or the trueing up of members that are out of line would be second-nature. Such riders being the exception, however, the transmission simplest in its composition and up-keep is the most popular and best adapted to riders. Absence of complicated parts is a feature of the belt drive. This is lacking in other forms of transmission which are therein inferior.

A belt transmission consists of two pulleys, a belt and perhaps a coupling or idler. When necessary a belt is lubricated by applying a solid dressing while it is running. When it stretches, the rear wheel is adjusted to take up the increase in length, or the coupling itself will take care of this. On a flat belt, the idler need only be set up a trifle more. **The belt fits its pulleys.**

A chain transmission consists of two sprockets and a chain with one or more coupling links. The chain is made up of a number of links, each consisting of two rollers, two bushings, two pins or rivets and two side-plates. The coupling links have the side-plates and a special locking device, small and easily broken. The lubrication of a chain is a complicated process. When the chain stretches it no longer fits the sprockets. It is then necessary to remove it

and insert the special couplings, a dirty process and one requiring considerable skill. These spare parts must be carried, or the transmission will be disabled, and the machine rendered inoperative.

The care of a belt under all conditions of service involves but a minimum of skill, time and labor.

On the score of silence, and likewise simplicity, the superiority of the belt is very evident.

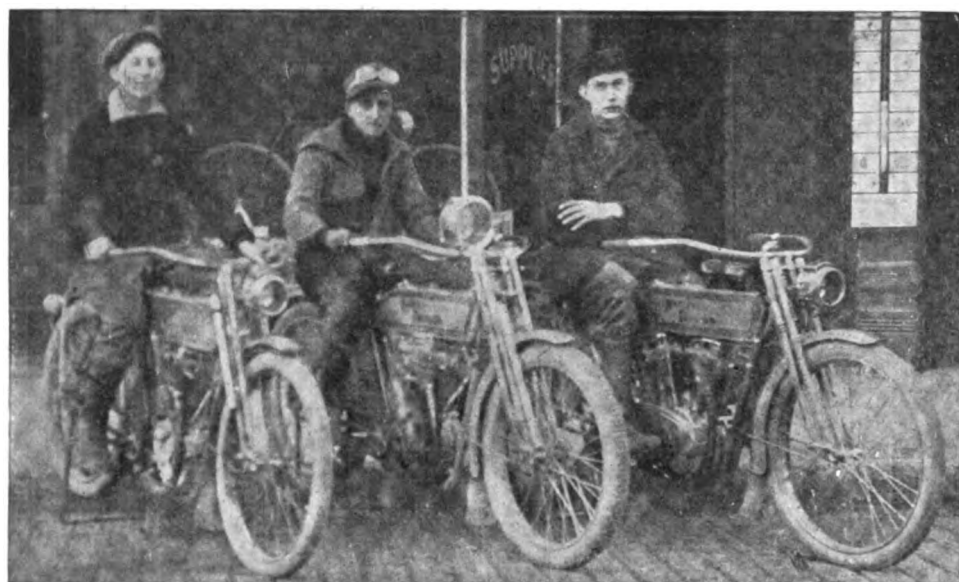
MANUFACTURING CO.

AND BELT MAKERS

Massachusetts

transmission of comfort, cleanliness, silence and simplicity—the transmission found on 80% of all belt drive machines.

Harley-Davidson Wins Every "5-35" Single Makes Faster Time



ZIEGLER

WILKINS

GRISSE

TWIN CYLINDERS

First—Harley-Davidson, Grisso
 Second— ———, Rhoades
 Third— ———, Pence
 Fourth— ———, Lubbers
 Fifth— ———, Clark
 Sixth— ———, Scofield

FIVE HORSE SINGLES

First—Harley-Davidson, Wilkins
 Second— ———, Horner
 Third— ———, Strong

FOUR HORSE SINGLES

First—Harley-Davidson, Ziegler
 Second— ———, Hicks
 Third— ———, Vull
 Fourth— ———, Dase
 Fifth— ———, Hadley

ALL Harley-Davidsons were regular stock machines and the Springfield Hill Climb results furnish positive proof once more that Harley-Davidsons are what we claim them to be—the most efficient motors made—bar none.

Harley-Davidson Motor Co.

Producers of High Grade Motorcycles for Eleven Years

Event in Springfield Hill Climb Than Any Twin of Other Make

AT THE HILL CLIMB HELD BY the Springfield, Ohio, Motorcycle Club on Snyder Hill, November 10th, Harley-Davidson motorcycles won first in every class.

The Harley-Davidson "5-35" single not only won its own class but made faster time by an average of 8 seconds than any one of the twin cylinders of other make in the twin class.

312-C Street, Milwaukee, Wis.

Producers of High Grade Motorcycles for Eleven Years

If You Want to Know Why the "R-S" is the "Finest Motorcycle in the World"— Get our catalog.

So many are the good points of the "R-S" that only a catalog can do justice to The Finest Motorcycle in the World.

From the "R-S" motor, undoubtedly the most simple, most durable and most flexible ever built, down to the genuine Bowden wire control system, the "R-S" is the embodiment of all that is desirable in a motorcycle. It has a surplus of all the necessary qualities—speed—power—durability—absolute comfort. Learn what we offer you in the R-S—write for our catalog today.

Here are a few—a very few—of the "R-S" Features

Foot-rests, double brakes, double oiling system, R-S shock-absorbing spring seat post, adjustable to weight of rider, a powerful, long stroke motor

with imported "heavy duty" ball bearings, the famous "R-S" cone clutch with cork inserts, absolutely the most perfect clutch on the market, etc., etc.

Get our catalog and learn the rest.

READING STANDARD CO.

306-340 Water Street

READING, PA.

Afford Perfect Traction— Prevent Slipping and Skidding

Mud, sand, slippery pavements or snow will not spoil your sport if you always carry Weed Chains.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write Dept. B for particulars

Weed Chain Tire Grip Co., 28 Moore St., New York

WEED ANTI-SKID **CHAINS** FOR **MOTORCYCLES**



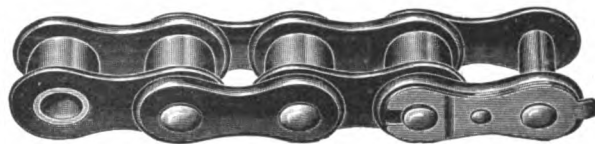
Economy Is The Keystone Of Success

If you want to make the first long step toward true economy in the purchase of guaranteed motorcycle supplies and accessories, send for our large illustrated catalog. It will save YOU Money.

OBERWEGNER MOTOR CO.
Toledo, O.

"Whitney" Chains Are Built For Strains

Every "Whitney" Chain has a reputation back of it, a reputation of having been tested in the most trying service and never failing to make good. We've made chains for years and through our untiring efforts to produce nothing but the best our chains have gained a remarkable reputation. You can't go wrong by placing a "Whitney" on your machine.



When making replacements insist on a "Whitney" and get acquainted with its merits.

The Whitney Mfg. Co.
HARTFORD, CONN.

"A DOLLAR IN THE LOCK IS WORTH FIFTY IN THE REWARD"

"Motorcyclist's Book of Proverbs"

¶ Keep your name off the list of "Stolen Motorcycles." Almost daily you see mention of another machine stolen. Laws against motorcycle thieves are weak and the only way to thoroughly protect yourself is by locking your machine so it cannot be moved except by YOU—and the only lock that prevents machine being moved and that cannot be picked, pried or cut, is the "SABO."

¶ You can safely leave your motorcycle anywhere if you have a Sabo lock. It fits tight to the frame—cannot be pried off—there are no chains to be cut by pliers. You've got the goat of every motorcycling "Jimmy Valentine" that wants a ride on your gasoline. The lock is scarcely noticeable. The would-be thief will perhaps not see it; will walk up to the machine acting as if it were his own. But when he tries to move it from the stand he'll learn "Sabo's on the Job."

It's made of bronze metal, neat, simple, strong—fits your smallest pocket—lasts forever. The stand is locked securely to the frame—the machine cannot be moved while the lock is there—no danger of breaking spokes or chain by forgetting the lock and pushing machine from stand. It is impossible to wheel or ride the machine away.

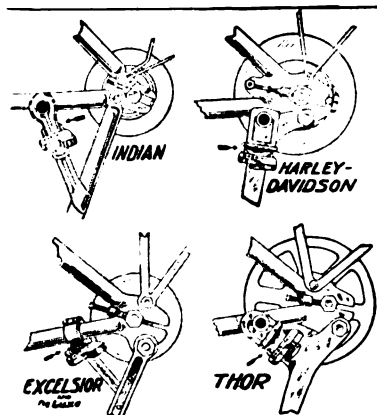
¶ We prefer to have you buy from your dealer, but, if he does not have it, send this order blank with a dollar and the lock will come back to you, satisfaction guaranteed, prepaid, by return mail.

JOBBERS

List this in your 1913 Catalog. Cuts, literature and advertising matter furnished. Write for proposition.

DEALERS

Stock this lock. Showing it means selling it. We refer inquiries, furnish cuts, literature, etc. Send for proposition.



Sabo Manufacturing Company

3110 West 25th Street

**CLEVELAND
OHIO**

Sabo Manufacturing Co.
CLEVELAND, OHIO

Enclosed find a dollar for a Sabo Motorcycle Lock for machine.

NAME.....

ADDRESS.....

DEALER'S NAME.....

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

NOTICE TO DEALERS

Definite arrangements have been made with motorcycle manufacturers throughout the country whereby United States Tires will be furnished either as regular equipment or on special order on every make of motorcycle during the 1913 season.

UNITED STATES TIRE COMPANY
NEW YORK

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

EXHIBITORS IN CHICAGO SHOW

Long List of Representative Manufacturers is Now in Hands of Committee and Applications Still Coming in Necessitate Option on Another Section of 800 Square Feet.—Advertising Campaign is Now in Full Swing and Floor Plans Will Soon Be Ready.

CHICAGO, November 25.—As plans for the independent Motorcycle Show develop, it is increasingly evident that the exhibition is due to mark an epoch in motorcycling, for the enthusiasm with which manufacturers and jobbers have entered their applications for space is without precedent in this field. Because of the unexpected deluge of applications the Show Committee has found it necessary to apportion space on a sliding schedule, the exhibitors not being allotted the full area specified in their communications, and in some cases this has caused dissatisfaction. It is argued, however, that it is more reasonable to reduce the space of several dozen firms than to completely shut out a few prospective exhibitors, as would be necessary if all the applicants were allowed the space they desired.

Another Option Taken.

In general, the exhibitors have admitted the necessity for the action of the Show Committee and all concerned are pulling together like Trojans for the success of the enterprise. Since the last allotments were made by the committee a number of applications have been received and the committeemen have obtained an option on an additional section of 800 square feet. Even with this extension of the show space it is not likely that all the demands of late-comers can be met, and the committee advises manufacturers to file their applications at once.

Show Is Well Advertised.

Announcement is made that large posters advertising the show will be ready for mailing to every motorcycle dealer in the country about December 1. No less than 81,000 envelope stickers have been printed, and the committee took up the task of mailing them to exhibitors on November 25, so that their use on all outgoing mail may advertise the coming show from coast to coast. All in all, the show is being advertised most effectively, the publicity it has already received being much more potent, in the opinion of experts, than that obtained in other years when the motorcycles were overshadowed by the motor cars at the National Automobile Show.

No Space No. 13 on Floor Plan.

Floor plans, showing just where each exhibit is located, will be forwarded to the exhibitors on or about December 15 and it goes without saying that all contracts for space must be on file before that date. It is worthy of note that there is no space numbered 13. Prospective exhibitors showed a disposition to give this number the "go-by" and the Show Committee simply

eliminated it from the schedule. In referring to the matter one of the largest exhibitors said laughingly: "We don't intend to have even the suggestion of a hoodoo about this exhibition, and while I have no personal objections to the number 13, it doesn't hurt my feelings a bit to see it wiped off the floor map. We can get along without it."

The List of Show Exhibitors.

The list of exhibitors to date is given as follows:

Pope Mfg. Co., Hartford, Conn.; Flanders Mfg. Co., Pontiac, Mich.; Chicago Cycle Supply Co., Chicago, Ill.; Bosch Magneto Co., New York City; H. & F. Mesinger Mfg. Co., New York City; Excelsior General Supplies Co., Chicago, Ill.; Mead Cycle Co., Chicago, Ill.; Purdy Bros., Chicago, Ill.; Van Cleef Bros., Chicago, Ill.; Angsten-Koch Co., Chicago, Ill.; Eclipse Machine Co., Elmira, N. Y.; Bicycling World, New York City; Fox Mfg. Co., Seattle, Wash.; North Chicago Machine Co., Chicago, Ill.; Greyhound Motor Co., Buffalo, N. Y.; Beckley-Ralston Co., Chicago, Ill.; Allied Motors Corporation, Chicago, Ill.; Excelsior Motor Mfg. & Supply Co., Chicago, Ill.; Triumph Mfg. Co., Detroit, Mich.; Aurora Automatic Machinery Co., Chicago, Ill.; Black Hawk Motor Co., Rock Island, Ill.; Motorcycling, Chicago, Ill.; Fowler-Carnes Co., Aurora, Ill.; Wheeler & Schebler, Indianapolis, Ind.; Weed Chain Tire Grip Co., New York City; Atlas Specialty Mfg. Co., Chicago, Ill.; Badger Brass Mfg. Co., Kenosha, Wis.; Graton & Knight Mfg. Co., Worcester, Mass.; Majestic Mfg. Co., Worcester, Mass.; Reading Standard Co., Reading, Pa.; Harley-Davidson Motor Co., Milwaukee, Wis.; Hendee Mfg. Co., Springfield, Mass.; Miami Cycle & Mfg. Co., Middleton, Ohio; Kokomo Rubber Co., Kokomo, Ind.; Aermore Mfg. Co., Chicago, Ill.; F. W. Spacke Machine Co., Indianapolis, Ind.; Standard Welding Co., Cleveland, Ohio; Corbin Screw Corporation, New Britain, Conn.; Hawthorne Mfg. Co., Bridgeport, Conn.; Standard Thermometer Co., Boston, Mass.; H. T. Roberts, Chicago, Ill.; Schickel Motor Co., Stamford, Conn.; Minneapolis Motor Co., Minneapolis, Minn.; New Era Auto-Cycle Co., Dayton, Ohio; American Motor Co., Brockton, Mass.; Henderson Motorcycle Co., Detroit, Mich.; Emblem Mfg. Co., Angola, N. Y.; Consolidated Mfg. Co., Toledo, Ohio; Waverley Mfg. Co., Jefferson, Wis.; MOTORCYCLE ILLUSTRATED, New York City; Excelsior Cycle Co., Chicago, Ill.; Barco Brass & Joint Co., Chicago, Ill.; Herz & Co., New York City; Chas. E. Miller, Anderson, Ind.; Great Western Mfg. Co., Laporte, Ind.; Iver Johnson's Arms & Cycle Works, Fitchburg, Mass.; Baxter Side Car Co., Cambridge, Mass.; Chicago Belting Co., Chicago, Ill.

GOOD ROADS MEETING.

COLUMBUS, Ohio.—At a meeting of the officials of the Ohio Good Roads Federation, held in Columbus this week, a legislative program for the coming winter was mapped out. It was determined to present two principal bills, one providing for a general good roads levy of one-half mill to be expended on the road system of most important highways.

PREST-O-LITE IN PORTLAND.

THE Prest-O-Lite Company, Indianapolis, Ind., recently opened a factory branch in Portland, Ore., and word has now just been given by H. H. Van Horn, who will have the management of the branch, that the Searchlight Gas Company of Chicago, Ill., will establish its Northwest branch in Portland. Several other Prest-O-Lite branches have been opened of late.

Striking Line of FLYING MERKELS

Self-Starting Attachment Dominates New Miami Features, but Various Other Changes Are Notable — Re-Designed Spring Frame, New Band Brake, Improved Motor, Reconstructed Tanks, Heavier Rims and Tires and Wider Mudguards.

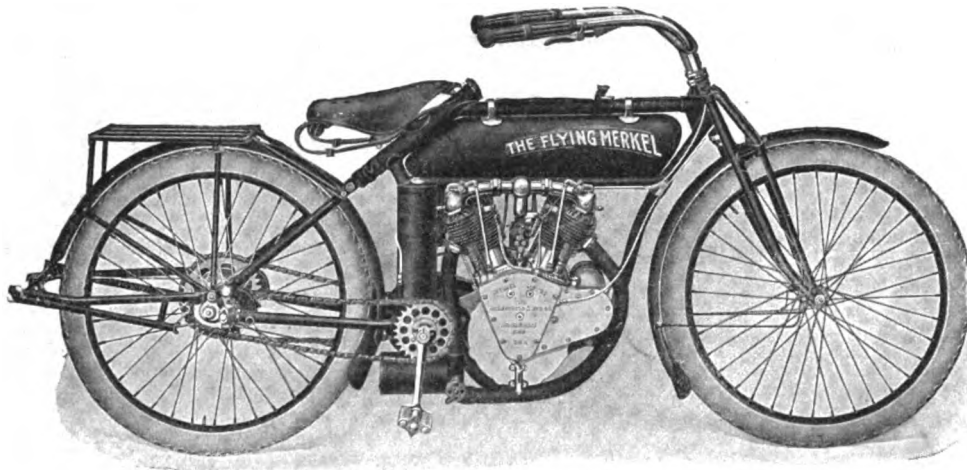
NEW and radical changes, which amount to little less than a revolution in motorcycle manufacture, mark the announcement of the Flying Merkel line for 1913. The machine has been newly designed, from tires to saddle, and no more resembles its predecessors than

the number be made; in other words, just twice as much time will be devoted to each machine as would appear on the surface to be necessary.

The dominating feature of the 1913 Flying Merkel line is the adoption of a self-starter.

capital, Joe Merkel has designed for the season of 1913 a line of motorcycles containing not only all the good features of previous models improved upon, but a number of new features that cannot fail to appeal to the trade at large.

The 1913 line consists of a 4. h., 30.50 cu. in. belt or chain machine, and a self-starting model with two-speed and foot boards; also a 7 h., 61 cu. in. belt or chain drive pedal machine and a self-starting two-speed model with foot boards. As previously asserted, these models are new from tires to saddle and are not doctored up from 1912 overstock. The motor is of a new design throughout, having a bore of $3\frac{1}{4}$ and a stroke of $3\text{-}43/64$ inches; full ball-bearings are used throughout, these being Hess-Bright or D. W. F., and these bearings are used also in the secondary and idler gears. The connecting-rod bearing in both motors is of new design, made especially for the Miami company in Europe. The pistons are of entirely new design, having only two rings and weighing seven ounces less than before. The pistons are made of material that cannot be broken and the Middletown company is very emphatic on this point.



Valve Side of Flying Merkel 7 h. Twin for 1913.

day resembles night. The essential Flying Merkel characteristics, however, such as the spring frame and spring fork construction, and the ball-bearing motor, have been retained, but noticeably altered. During the last few months, The Miami Cycle & Manufacturing Co. has put up a big addition to its factory, giving 55,000 square feet of additional floor space, and not only has it filled this addition with the most up-to-date machinery procurable, but it has scrapped most of the old equipment and replaced it with new automatic machinery of various kinds, designed to do three times as much work as formerly was possible.

New Inspection System.

Perhaps the most important change is the new system of inspection which has been installed. This system is so costly that heretofore it has been applied only in the big plants making the higher price automobiles, and in high-grade watch factories. This system means that every single part of the 1913 Flying Merkel motorcycles, and bicycles and coaster brakes as well, must measure to within one-tenth-thousandth of an inch to pass inspection.

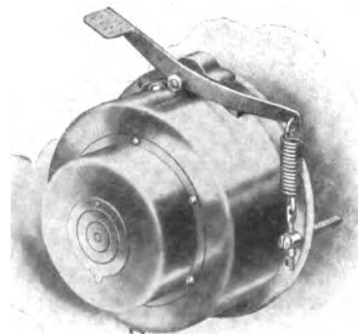
New productive heads throughout the factory make it possible to increase the output of the plant from about 6,000 machines a year to 20,000 or 25,000. Yet the policy insisted upon by President K. R. Jacoby is that instead of making this big quantity of machines, half

Other important features are the two-speed; the adoption of mechanically operated intake valves with adjustable tappets; foot-boards on the two-speed models; lower saddle position; the separation of the gasoline and oil tanks; wider mud-guards; heavier rims and heavier tires. The general appearance of the machine as usual suggests strength and raciness.

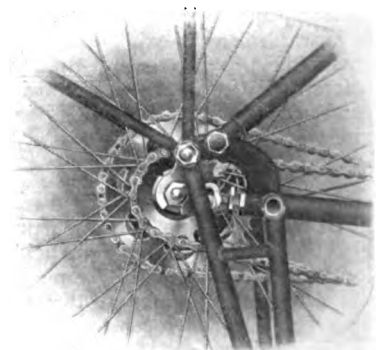
How successful an engineer may be in satisfying the demands of the trade depends to a great extent on the facilities at his command. Backed by a company in which harmonious effort is the key-note, a factory organization which is now second to none and unlimited

Some of the Improvements.

The valves are mechanically operated, and are made larger, with a seat of entirely new design for the inlet. The tappets are adjustable. The manifold pipes are larger and designed to be absolutely air-tight, insuring a perfect running motor at slow speeds. Priming cups of new design are fitted, these also being air-tight. The cylinders have been re-designed and the spark plugs are placed where they cannot foul from oil. The crankcase is also of new design with polished surface. Flywheels are made of steel drop forgings with a new system of counterbalancing. The tank is



Self-Starting Attachment.



New Rear Wheel and Frame Construction.

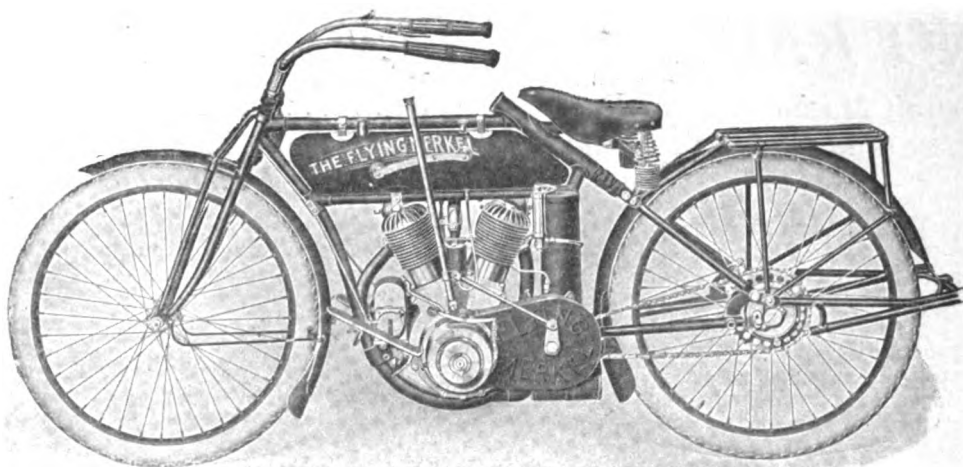
radically new and is made of two steel stampings, heavily tinned both inside and out, after being brazed together. On the interior of the tank are three baffle plates. These make an unusually strong tank which also presents a very neat appearance. By tinning the tank the enamel is prevented from chipping off as formerly was the case when a brass tank was used. The gasoline capacity is a little over $2\frac{1}{2}$ gallons.

Radical Changes in Frame.

The frame has been changed materially and twice as many forgings are used as heretofore. This gives a much stronger frame, though as a matter of fact the Flying Merkel never experienced any trouble with broken frames. The forks are wider and permit of the use of 3-inch tires, fitted with chains, on both front and rear. Mud-guards are of special manufacture, being of much stronger material with beaded edges, and are $4\frac{1}{2}$ inches wide. Rear forks are one inch in diameter, instead of seven-eighths of an inch, as was the case last year. The spring frame feature has been re-designed and one large spring is used in place of the two smaller ones. This spring is adjustable for different weights of riders. The new design permits of very low saddle position and makes as comfortable a machine as it is possible to design. The Merkel patented shock absorber is still a part of the hinge joint, and is made more substantial than before; it contains a much larger grease cup than the 1912 machine. The oil tank is integral with the frame and holds a little over a half gallon of lubricating fluid. Oil is fed to the motor by a reliable automatic throttle-control oiler, or left-side hand-pump, both of which have been re-designed and made simpler and more serviceable.

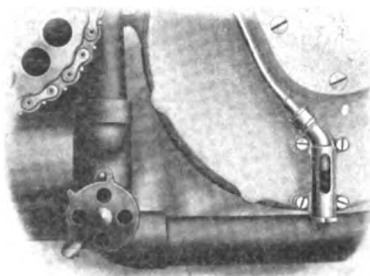
The rear fork ends are of new design, much heavier than in the past, and have positive adjustments for chain tensions. Rear wheels can be removed without loosening the mud-guard or letting the air out of the tire.

The handlebar control has been changed so that a new control wire can be put in by simply taking out one small screw. The wire is much heavier and does not run through the fork stem as previously. A very neat and efficient lamp bracket becomes a part of the triple clamp. The sliding parts of the spring frame and spring fork have neat leather jackets which keep out all dust and grit. The luggage carrier, which comes without extra charge on all models, is made from one-half



The Chain-Driven Twin, Viewed from Clutch Side.

inch seamless steel tubing, and is mounted on the rear mud-guard supports, which also are made of one-half inch tubing. Steel drop forgings enter largely into the construction of the luggage-carrier. As Designer Merkel expressed it, "You can't keep the riders from making a moving van out of a motorcycle, so I designed this luggage-carrier strong



View of Oil Indicator.

enough to carry a house." A very neat toolbox, enameled to match the machine, and fitted with a burglar-proof lock is supported on the rear of the luggage-carrier.

New Type of Band Brake.

The new Merkel band brake is similar to the former Merkel brake in general appear-

ance, but has been materially altered inside. It is a one-inch flat band, and the mechanism is so arranged that a contraction of the band takes place gradually, instead of binding with a jerk, a fault on some band brakes which has caused accidents. At the same time, the new Merkel band brake has a most powerful gripping surface. The two-speed gear is located in the rear hub, becoming a part thereof, and is what is commonly known as the sun and planet type. The gears are always in mesh, thereby preventing any possibility of stripping the teeth. They are designed so as to be practically noiseless and give a very liberal reduction. The control is by a lever at the side of tank; when pulled toward the rider it engages the low speed. When pushed forward the high-speed and clutch is engaged, and when midway the rear wheel is free.

Operation of Self-Starter.

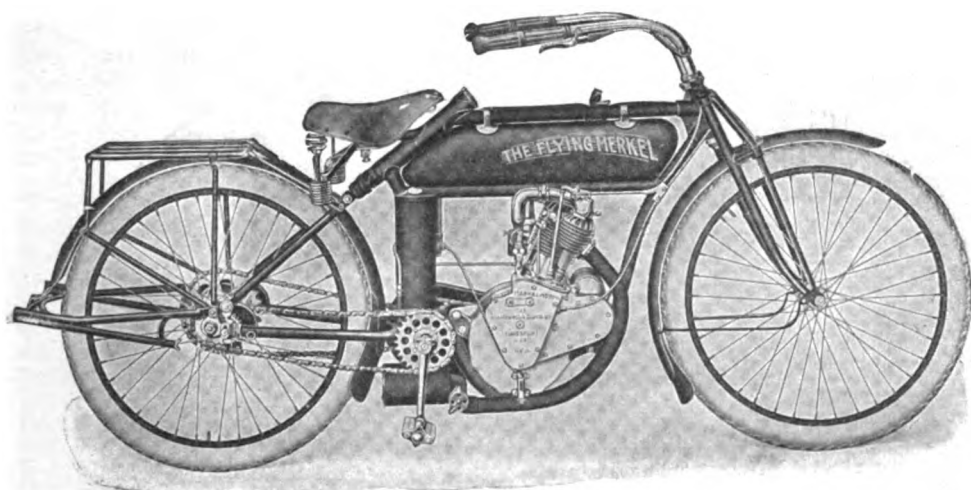
The self-starter is operated by large coil springs and is of the type which has proved the only successful starter on automobiles. It will turn the engine eight times when the small pedal is pushed, and when the engine is started the first 26 turns rewind the starter and automatically kick off, leaving it ready for instant use again. The self-starter is mounted on the left side, becoming part of the crankcase and turning the engine shaft.

Equipment for 1913.

As regards equipment, a wide choice is given. Federal, Goodyear or United States tires are offered; $2\frac{1}{2}$ -inch tires being fitted to single cylinder models, and $2\frac{3}{4}$ -inch tires, both front and rear, on twins. Person's "Champion," Troxel or Mesinger "Superba" saddles are offered. The carburetor is a new model of the Schebler, designed especially for the Flying Merkel. It has an auxiliary air-valve for use when unusually high speed is desired; tests have shown more than 60 m. p. h.

Following are the list prices of the 1913 Flying Merkel types: Model 40—4 h., belt drive, \$210; model 41—4 h., chain drive, \$210; model 45—4 h., self-starting, two-speed, \$285; model 70—7 h., belt drive, \$260; model 71—7 h., chain drive, \$260; model 75—self-starting, two-speed, \$335.

A GOLD watch fob was recently awarded Joe Wandstrat, a member of the Queen City Motorcycle Club, of Cincinnati, Ohio, for covering 48 miles on a little more than a pint of gasoline.



Valve Side of the Trim 4 h. Model for 1913.

NO RADICAL CHANGES IN 1913 HENDERSON

Detroit Machine Shows Racier Lines and More Powerful Four-Cylinder Motor, but in General Retains the Features Already Proved Satisfactory—Three-Stem Front Fork, Larger Tires, New Band Brake of Henderson Manufacture and Special Saddle.

DETROIT, November 25.—As evidence of the success of the original ideas brought out in the Henderson four-cylinder motorcycle, which made its debut about a year ago, the 1913 model of this machine shows no radical change, the differences being in small things. There is the same type of four-cylinder motor, the same long wheelbase, 65 inches, and the same kind of constructional ideas. The individual parts of the machine, however, have received attention that will bring about more efficient service on the road and greater ability in meeting all riding conditions.

For example, the motor has been made somewhat larger to give more power. The bore and stroke are now $2\frac{3}{8} \times 3$ inches, giving a power that is rated quite conservatively at 8 h. There is a drop in the intake manifold to the carburetor, and the effect of this is claimed to be a more even distribution of gas, with smoother running and more even firing.

More Oil Space and New Forks.

In the crankcase there is a greater oil capacity than before, so that lubrication is taken care of more thoroughly. There is a leveling cock for the oil, so that the rider can always have just the correct amount of lubricant in his motor. The motor bearings are now of white bronze.

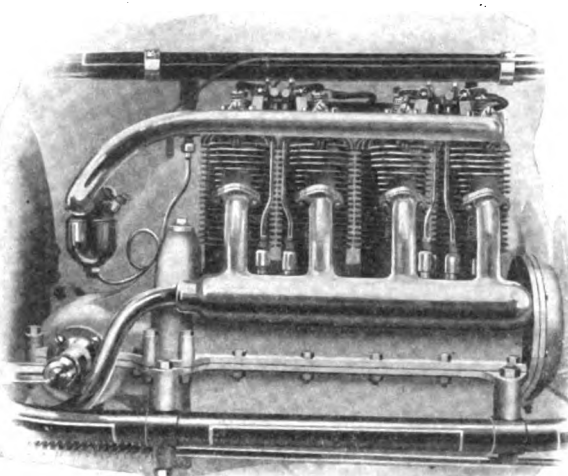
The front forks show greater strength, being made on the triple-stem plan. Both sides now continue up to the handlebar, with the main stem in the middle. The spring arrangement is the same as was used previously, having performed its work excellently. The transmission is also unchanged, chain drive with an Eclipse clutch being regular equipment. The clutch control lever, on the left side of the tank, is given a longer swing, however, resulting in greater delicacy of clutch control.

On both wheels three-inch tires are used.

this large size giving long mileage and absence of tire trouble. Both front and rear wheels are also provided with large axles, $\frac{5}{8}$ -inch in diameter; the front hub is a Corbin of the knockout type.

Henderson Band Brake.

The rear hub is something new. It has a band brake, and no coaster mechanism. With



Exhaust Valve Side of Henderson Motor.

the motor started by a crank, with foot-boards and no pedals, there is no need for the coaster parts in the hub, so they are left out. This rear hub and brake are of the Henderson company's own manufacture. Extension mudguards, of the kind that come well down on the sides, are used to protect the machine and rider from road dirt. There is a large clearance between tire and guard, and the forks are made wide, so that there is much space at the sides. Tire chains can be used nicely, and clogging up when on muddy roads

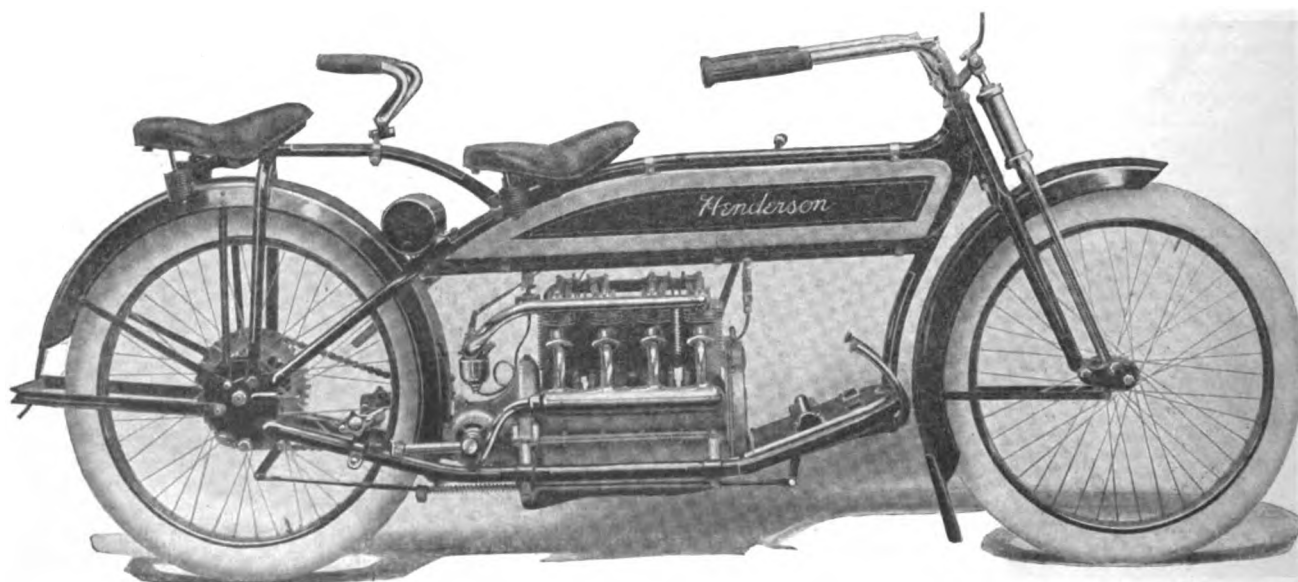
is done away with. The rear fork tips are unusually large forgings, making the frame very strong at these points to take care of the heavy strains encountered.

A change that is of little consequence so far as the principles of design go, but that makes a good deal of difference in appearance, is a drop at the rear of the top frame bar. This gives a racier appearance to the mount. Naturally this involved a little change in the shape of the tank, which is sloped down at the back and made square instead of round. The finish is changed, too, being a new panel effect that is quite striking. The tank now holds three gallons of gasoline.

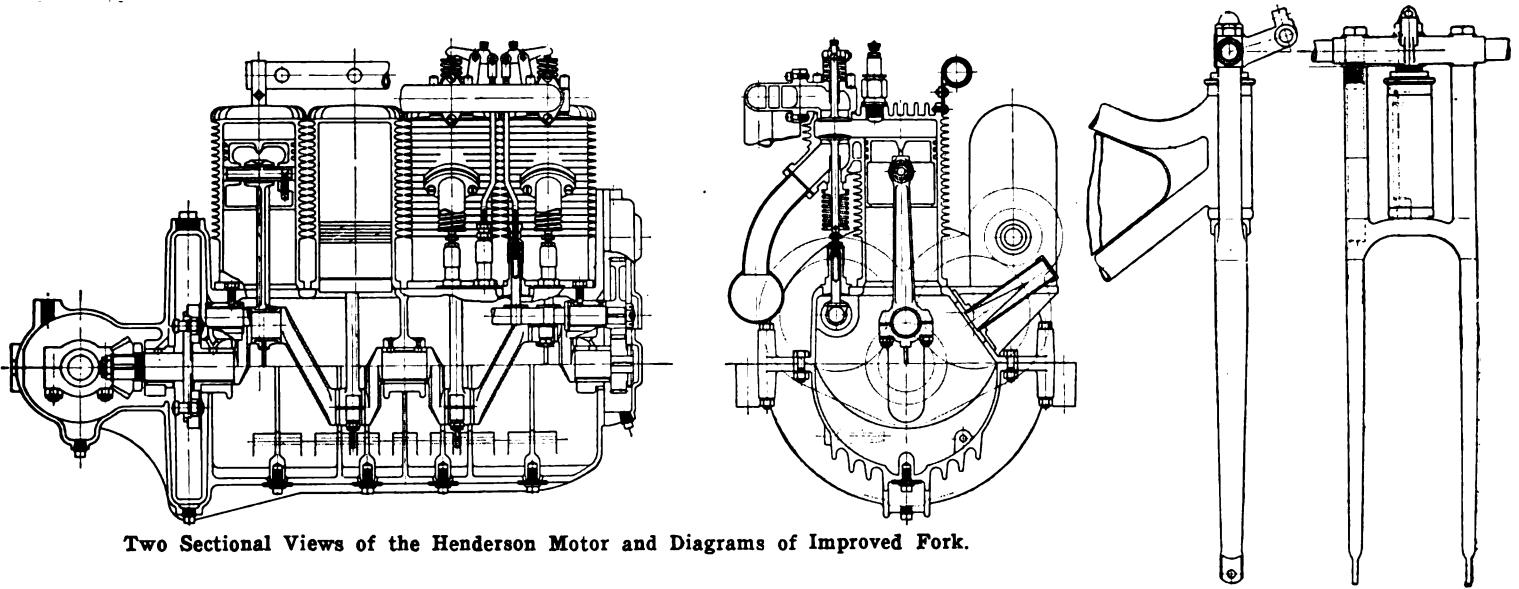
Other Interesting Details.

Several other little points have been given touches that improve them, although they are not radically altered. The foot-boards have been made $1\frac{1}{2}$ inches wider; a cylindrical metal tool-box is permanently attached to the frame behind the saddle, and there is a new clip to hold the stand in position when it is not in use. The design is such that it holds the stand up securely, yet allows it to be dropped easily with the foot for use, without need of soiling the hands or shoes in prying it loose from a stiff spring.

A new saddle will make its appearance as regular equipment on this machine. It was designed first for the Henderson, say the company officials, but Persons will make it a stock part of his saddle output in a short time, for it looks good. A new tandem is to be made for the Henderson for next season, the passenger to sit behind the driver. The aim in designing this was to make the motorcycle look like a machine designed for two, not as if the second seat was just a chance attachment. An unusual point is that the saddle is set two inches ahead of the rear axle. This



Striking View of the Improved Henderson for 1913. Note New Tandem Seat.



Two Sectional Views of the Henderson Motor and Diagrams of Improved Fork.

makes the machine easier to handle and improves its appearance.

A Busy Factory.

The Henderson factory is a busy place just now. It is a modern plant, erected only a short time ago, and everything is new, neat and shipshape. The plant is well supplied with light and conditions in general are favorable for the right kind of work in big quantities. The Henderson company has its own enameling plant, and has put in a nickel-plating department recently, so that it now does all its own finishing.

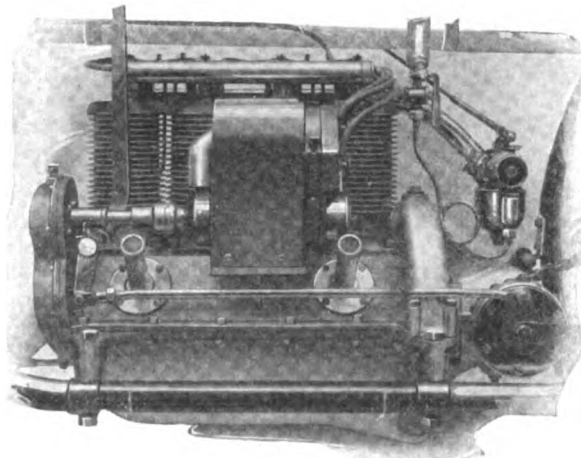
The Henderson Outlook.

President T. W. Henderson's office is next to the drafting room, where he is constantly in touch with everything the designing department does, as well as keeping a finger on the pulse of the entire plant. The 1913 selling season presents a very rosy hue to President Henderson. In an interview a few days ago, he said: "Why, the outlook is wonderful. At the end of the first week in October we had half of our 1913 output already contracted for, without even having talked about it to our agents. We can sell four times the number of machines that we sold this season without a doubt. We are gaining new agents at an average rate of one each day. Our output for 1913 is figured at 2,000 machines, but the chances are that it will be 3,000. We can make ten machines a day nicely, with our present factory. Detroit is a good city for manufacturing purposes—materials are all around close, where they are easily obtained.

"We haven't done any experimenting on two-speeds. With a flexible four-cylinder motor there is less need for two-speed gears, and we have not had much demand for them. We are exporting machines all over the world now, to Argentina, England, Australia, Singapore, Japan, etc. In fact, the man who took care of export orders was the busiest man in the office for a while this fall. Business is so good and coming so strong that I believe by the close of the Chicago Show our entire year's output will be sold, and applications for Henderson agencies after that will be too late. Present indications point that way. Our most sanguine expectations are being outdone by the inpouring of orders for 1913."

MOTORCYCLE AT THE FRONT.

ACCORDING to an English exchange, a Matchless motorcycle and sidecar are being used by cinematograph operators in the employ of Pathé Frères, who are now obtaining motion pictures along the firing line of the Bulgarian army.



Inlet Valve Side of Henderson Motor.

ON PUBLICITY STAFF.

HUGH SHARP, formerly assistant city editor of the *Evening Wisconsin*, of Milwaukee, is now a member of the publicity staff of the Harley-Davidson Motor Company, being associated with Frank B. Rodger in getting out the Harley-Davidson Dealer and in handling the general publicity work.

DEMONSTRATING WITH SIDECAR.

MANY dealers are alive to the fact that a sidecar is a valuable addition and aid to their business, but there is a point in practical demonstrations that has not been generally learned. A dealer who handled a number of Majestic cars this season told an interesting story on a recent visit to the factory in Worcester, Mass. "Aside from the nice profit I made from sales of the cars themselves," he said, "the first Majestic car that I had this season paid for itself within a month by the additional sales of motorcycles it enabled me to make, for it is invaluable for demonstrating a motorcycle to a timid prospect who will not venture to mount a machine before he has a clear idea of how to operate it. But I made some mistakes at first by driving the novice too fast. The majority of prospects

start with the idea that they will ride for pleasure only and, of course, the novice is not accustomed to high speeds, so after I had given a promising prospect a forty-mile-an-hour spin I found I had created a reverse impression, for he declared he wouldn't trust himself with that wild thing if it was given him as a present. Now I confine my demonstrations to smooth, easy runs, of fifteen to twenty miles an hour. The novice can talk business at that speed, and I get the orders."

THE SOUTH AFRICAN FIELD.

OWING to the fact that it can run on a 'nigger track,' the scope of the motorcycle in South Africa is enormous," says an English manufacturing representative who has recently returned from a business tour into that country. He states that the combination most in demand is a sturdy 7 h. machine with sidecar; belt transmission is barred, owing to the climate.

CINCINNATI EXPANSION

IN order that the new territory which has recently been added to Cincinnati may be well patrolled, the city officials have added six motorcycles to the police department equipment.

LIVELY ELMIRA MEETING.

AT a recent meeting and banquet of the Elmira (N. Y.) Motorcycle Club the Eclipse Machine Company cup was awarded to George Ells, winner of the second annual endurance run. Ells is a well-known dealer in Elmira, handling Yale machines. The club has made plans for next year's runs, and two gold watches and two silver cups will be offered as prizes.

ANOTHER ONE MISSING.

A 1912 model, 6 h., belt-driven Excelsior twin belonging to Ernest Anderson, of Westport, Conn., was recently stolen and the owner offers \$50 for its return. The motor number is 27,814 and the license, Conn., 308. Anderson is led to believe that the machine has been taken to New York City.

NEW H.-D. AGENTS.

WALTER KLUCZEK, of Newark, N. J., formerly agent for the Harley-Davidson, has been succeeded by the Bush & McDougall Company, of that city.



IRELAND as A

EVERYWHERE one goes along the main touring routes in Europe, motorcycles are now being encountered in rapidly increasing numbers; but of all the foreign fields awaiting conquest by the American rider there is none more promising than the Emerald Isle, but none, oddly enough, the possibilities of which seem to be less appreciated by manufacturers and riders alike in the United States. I say oddly, because the bonds of sympathy and mutual interest between Ireland and the United States are particularly strong, owing, no doubt, to the fact that during the past two-thirds of a century millions of Irish men and women have crossed the Atlantic to find a home in the republic.

However, several influences are now combining to put Ireland prominently on the map for American motorcyclists and the Yankee motorcycle trade. For one thing, many of the Irish "exiles" who, as above mentioned, sought fortunes in America, have within the past few years participated in the Irish home-going movement, which has as its object the inducement of Irish-Americans to pay an extended visit to the "ould sod" and even to settle permanently in Erin if they feel so inclined. Nothing more natural than that these Irish-Americans (many of them comparatively young men) should be impressed with the dual opportunities which Ireland presents—on the one hand as a most fascinating touring field for American riders, and on the other hand as a profitable market for machines and accessories of American manufacture.

Recruiting Irish Riders.

Another factor that is all-important in the Irish motorcycle situation is found in the new prosperity which has come to the Land of the Shamrock these past few years. This commercial and industrial regeneration of the fertile island has done double duty in furthering the cause of the motorcycle. One effect has been to put more money in circulation and to thus enable a larger proportion of the Irish population to own the motor machines. The other outcome bearing upon the case is seen in the policy of road improvements which is now general throughout Ireland and in the provision of more and better hotels in the scenic districts—an essential to the comfort of touring motorcyclists.

Statistics seem to indicate that France, Holland, England and Belgium have been the countries most favored by the Americans who have indulged in motorcycle vacations abroad—possibly due to the splendid roads in all of these countries—but in scenic beauty Ireland can vie with any of them, if, indeed, she does not surpass them all. And, as for roads, whereas all the Irish highways do not, naturally, reach the highest standard of excellence that is found in France, there is scarcely an artery of travel in the length and breadth of the island that would not be accounted, if it were located in America, an exceptionally good road, whereas some of the Irish highways, in the vicinity

of the principal tourist meccas, such as Killarney, are easily in the same class as the roads in our White Mountains and on the North Shore of Massachusetts.

On Ireland's Mountain Roads.

And since passing mention has been made of American mountain roads it may not be amiss to say a word, just here, regarding the mountain roads of Ireland. Much of the finest scenery in Ireland is to be found in the mountain districts—in County Kerry in the south, in Connemara in the west, and in Donegal in the north. It is not comparable for sheer magnificence with the Alps or with our own Rockies, but in a milder way these Irish highlands are just as beautiful, and with their mists and their play of lights and shadows they have a softness that is most insistent in its appeal. And best of all, from the standpoint of the motorcyclist, these heights are negotiated by roads of pretty good quality and with surprisingly easy grades considering the altitudes attained. Whatever deficiencies may be charged against Irish roads in any part of the island are to be ascribed principally to a too general use of carboniferous limestone.

The American motorcyclist in Ireland will find that in some districts it is a long distance between repair shops. In all the cities and larger towns garages are now to be found, and even in the isolated mountain regions that are popular with "trippers," repair and gasoline problems are no longer acute, because sight-seeing motor char-a-bancs have been placed in service on these routes within the past year or two, and the independent motor tourist profits thereby, but there are some sections where the rider who forsakes the main-traveled roads must be content with such first-aid repair work as can be performed by the local blacksmiths. It is only just to admit, however, that the average of such work is away above what would naturally be expected. Most of the blacksmiths, however primitive their equipment, have the adaptability and the proverbial "quickness" of the Irish race, and it is a pretty serious motorcycle ailment that they cannot remedy.

How Bicycle Shops Help.

Conditions for the transient as well as the resident motorcycle riders are also improving because the bicycle shops in all parts of the island are now stocking motorcycles. The Irish, alike to some other nationalities on the other side of the Atlantic, never allowed their enthusiasm for cycling to lapse as did we Americans. There has been all along a sufficiently widespread use of the bicycle to support bicycle shops in every community, and these business houses are now proving a ready-





MOTORCYCLE FIELD

BY WALDEN FAWCETT



to-hand means of introducing the motorcycle. In this respect motorcycle interests have a decided advantage over the automobile trade. Moreover, Ireland is one country where all the natural conditions as well as the sales situation is more favorable to the two-wheeled vehicle. For example, many of the Irish roads are really much better suited to motorcycle traffic than to automobiles, and then there is the circumstance that a large proportion of that population which in Ireland makes up the "possible market" consists of persons of moderate means who can more readily afford the first cost and upkeep of a motorcycle than they could the expense of an automobile.

American makes of motorcycles are not as well known in Ireland today as they will be a few years hence—especially if American manufacturers will awake to their opportunities and go after the trade. As has been already intimated the Irish in many instances are favorably disposed to American goods simply because they come from the United States, and added to this instinctive preference in the case of the motorcycle is the fact that the American machines which have been seen in the hands of touring "Yankees" have made a most favorable impression. Yet another auspicious influence is found in the circumstance that some of the most up-to-date of the cycle shops are under the management of Irishmen who have spent some time in the United States.

Handling American Accessories.

I recall one such establishment in a small town in County Mayo. This town, which is rather small in size, it seemed to me, to support a bicycle and motorcycle store, had the further disadvantage that it was not well located; its only means of rail communication being via a rather unsatisfactory branch road. Yet the dealer, a young man who only a few years ago came back to Erin from the United States, had as neat a shop as one could wish to see; carried an excellent range of stock, and provided adequate repair facilities. He already has a good trade in various lines of American accessories and supplies, and says that

he could do much better by American houses if they would only abandon their present policy of, in most cases, supplying the Irish trade only through English agencies, etc. This plan of shipping American goods to England to be shipped back to Ireland means, of course, that the Irish retailer has to pay carriage charges that are considerably heavier than they would be had the goods been consigned to an Irish port direct. Worse yet, the Irish dealer has to pay also the heavy profit exacted by the British

middleman, and the effect of this extra "overhead" is that the goods can only be offered to the consumer at higher prices than are asked for competing lines manufactured in England.

For all that Ireland is a comparatively small country and in great measure agricultural in character, she boasts a most comprehensive network of roads. The road maps provided for motorcyclists divide the island into two sections, located, respectively, north and south of the main road from Dublin to Galway, running east and west across the middle of the island. South of this dividing line there is an area of a little over 15,000 square miles, and in this territory there is an aggregate of 10,415 miles of roads that are pronounced adapted to motorcycling. North of the dividing line, in an area of 16,500 square miles, there are motorcycle routes that total 14,100 miles.

Tourists Must Watch Weather.

Motorcycling in Ireland is likely to call for more attention to weather conditions than in some other countries. At certain seasons, notably in the spring, there is much rain and, whereas it is seldom that any of the roads are impassable, care may be needed on the part of the rider. The limestone roads are likely to be very slippery when wet. On the other hand, the granite-surfaced roads such as are found throughout the picturesque highlands of Donegal are almost always better in wet weather, whereas the landscapes in this region of mists and mountains are especially impressive after a rain.

If a road is for any reason in such condition as to make riding unpleasant the motorcyclist may usually, with impunity, take to the footpath. To be sure, it is illegal to ride a bicycle or motorcycle on the footpath in Ireland, but the practice is pretty generally indulged in, the police and magistrates in most instances taking a very lenient view of the matter. This, of course, has reference to rural districts. In the neighborhood of towns and cities footpath riding is not permitted at all, but in such localities a bad road is very rare.

Possibly the courteous treatment generally accorded touring riders in Ireland is in some measure due to the fact that the members of the Royal Irish Constabulary (the rural police) are themselves enthusiasts on the subject of this form of locomotion. For years past the members of the Constabulary have used bicycles to a considerable extent, and now they are taking to the motorcycle, which, in addition to the pleasures it affords is of great assistance in the discharge of their official duties, seeing as how these officers have, in many instances, jurisdiction over considerable areas. The constabulary barracks are found at intervals on the main-traveled roads throughout the entire countryside, and the American rider, when in doubt, will always be safe in inquiring at these headquarters for information as to the condition of the roads and for lodgings in those sparsely-settled regions where hotels are few and far between. It should be added, though, that this latter is a rare condition in Ireland. Not all the hotels, unfortunately, are first class, but the smallest town will usually boast a hotel of some kind, and, to tell the truth, I do not believe that the average of these small hotels is any worse if as bad as that of many of the hotels in



Touring in the LITTLE GREEN ISLE

F. W. BAUM

IN the present instalment of the serial story dealing with his recent European tour by motorcycle F. W. Baum, the Champaign (Ill.) rider, treats of his experiences in Ireland and gives some interesting sidelights on roads, scenery and customs in the Little Green Isle. On the whole he found touring conditions highly satisfactory. His article follows:

Despite the fact that we had rough weather until the last two days my ocean trip might be called a pleasant one. It was rumored about that I was out for an extensive motorcycle tour, and many of the passengers asked me to go below and show them the machine. Those who inspected the mount thought very well of it, and I was sorry that I could not run it for them. This, of course, was out of the question as the transportation rules require all gasoline to be removed before putting the machine aboard.

We reached Liverpool at 3 o'clock in the morning, but as the tide was against us we were forced to anchor, waiting until 11 a. m. before docking. I experienced little delay with the Customs, as England is a free trade country. I left the machine at the Customs Office until I had made arrangements to take the night boat across the Irish Sea to Dublin. The passenger ticket for this trip cost \$3.25, and for the machine I paid \$1.25. I then went to the American Express office and got my mail, at the same time sending some cards to friends. Returning to the Huskinson docks, I got my machine and as I was still without gasoline I pushed it to the Dublin packet docks. About 8 p. m. I got under way for Ireland.

The Trip to Dublin.

For genuine roughness that trip across the Irish Sea beats any I ever made, but we arrived safely at the Dublin docks about 6 o'clock the next morning. I watched the loading and unloading of my machine at all times because stevedores use as little judgment as possible when handling baggage and cargo. They would unhesitatingly try to pick up a 300-pound motorcycle by lifting it by the control rods or horn or any other part. Before I could stop them they had placed one of the hoisting hooks on the pedal chain and another on the handlebars. The result was that my pedal chain was broken, and by the time the machine was safely landed the flexible end of my rubber handlebar was also broken. I at once secured gasoline—at 38 cents per gallon—fixed my pedal chain and went up to the city.

I soon became acquainted with a native motorcyclist, and together we made a circuit of the city on our machines. For the most part I found the streets fairly well paved. The tourist finds many points of interest here, among which are the Irish House of Parliament, Trinity College and Phoenix Park. While in Dublin I purchased a pair of pigskin puttees and a pair

of heavy tan shoes, getting both for the amount the puttees alone would cost at home.

The Lakes of Killarney.

I left Dublin after lunch for the Killarney Lakes, and about eight miles out of Thurles I picked up a hob-nail in my rear tire. As I started to make repairs Dame Nature, probably through sympathy for me, began to weep. Some peasants noticing my plight suggested that I put my machine in a cow-stable in the rear of their thatched cottage, which I gladly did. After waiting for the rain to abate somewhat I started on my way again and found that if I had kept going for another mile I would have encountered no more rain. There were several straight stretches which allowed me to speed up to 65 miles an hour. As a rule the Irish roads are very fine, but the turns are so frequent that speeding is dangerous; the roads are seldom marked.

I put up for the night at an inn near Holycross Abbey. This is a very impressive ruin, being built on a little hill, with a great many trees surrounding it on three sides and a lagoon on the other. The Abbey was built in 1214. A nominal fee is charged to visit the ruins, and the money collected in this way supports the caretaker. Passing along a beautiful road I noticed a very large building surmounting a hill, and upon consulting my guide I found this was known as the Rock of Cashel and that it was formerly the castle of an Irish chieftain.

Visiting a Peasant's Cottage.

Twelve miles further on I came to the pretty city of Tipperary, which is very modern compared with the other Irish towns. It is 73 miles from here to Killarney, but as I wanted to stop overnight at a peasant's home I selected a pleasant looking place about five miles from Killarney. The people were very hospitable and went to considerable trouble to fix a bed and some supper for me.

It was only a few minutes after leaving this peasant home the next morning that I found myself in the quaint city of Killarney. I was at once beset by "runners" and porters, but I decided to select a hotel myself. The Globe looked more inviting to me than the others, and while examining the register I was quite surprised to see the name of one of my former high school instructors; upon inquiry, however, I found that she had left about two weeks previously. I next procured a map of the lake district and then picked out the most contiguous route covering the parts of interest. I paid a fee to go up into Ross Castle, from which I obtained a beautiful view of the upper lakes, and then took a boat trip around the island. Returning to the village by a different route, I visited the present Earl of Kenmare's Palace, with its beautiful grounds. From here I started for the town of Kenmare on the southwestern coast.

At Blarney Castle.

On the way I passed the point on the cliffs known as "Ladies' View," where I obtained panoramas of the upper lakes and Dunloe's Gap. The lower lake is three miles wide by five miles long. From this point the roads became quite mountainous, with such quick turns that I had to exercise a great deal of caution, mainly on account of the frequency of large flocks of sheep on the roads near Kenmare. I then followed what is known as the coast road to Cork, by way of Glengarriff, Bantry and Queens-town. Although it was late in the afternoon when I arrived in Cork I thought I might as well visit Blarney Castle before dark. Leaving St. Patrick's street I crossed the River Lee and rode alongside the high cliffs.

The little park near Blarney Castle was crowded with people, as there were some sort of games going on. On being admitted to the grounds, I immediately ascended to the top of the dilapidated castle, by climbing the usual damp, spiral stone stairway. At the top I noticed three red-coated soldiers holding another by the heels in order that he might kiss the Blarney stone. There were several girls standing about and I was surprised to see the soldier, after being drawn up, deliberately walk over and kiss one of the colleens, and then tell his companions to hold him again. It was soon explained to me that the girls, who were afraid to lean over to kiss the stone, appeased their desire for "Blarney" by allowing some person who had just kissed the stone to kiss them. This was called "fresh Blarney." Seeing a pretty girl in the party I decided that I wanted to be "fresh Blarney," and accordingly had the soldiers hold me over the embankment and upon getting up I had no trouble in disposing of my kiss.

The Return to Dublin.

On returning to Cork a large stone was so violently thrown by my wheel that it dented my Purdy pump and the latter could not be used. I went to a garage and rolled out the dent, as I couldn't think of being caught on the road with a disabled pump. I also doctored a stone bruise on my rear tire with a tire sleeve, or a "gaiter," as they are called there. Dublin was only 160 miles distant and I left about 3 p. m., riding four hours before stopping for the night. From Michelston to Caker, 17 miles, I had a perfect road, which I covered at a 65-mile an hour clip. I remained at Kildare, an army post, over night. I made the 130 miles from Cork to Kildare in four hours and averaged 68 miles per gallon of gasoline.

The next morning at 7 o'clock I was on my way to Belfast, about 130 miles away. I stopped for breakfast at Dublin and also to pay a visit to the offices of the *Irish Motorcyclist*. I was very cordially received and did not get away before I had given the editor a story of my trip. While walking over O'Connell bridge and down Grafton

street I noticed that the natives seemed to stare at me. I stopped a friendly "bobby" and inquired as to the reason. He looked me over with an amused smile and then said, "Probably because you look like a wild man from the West, and maybe because you are a tourist." I took an invoice of myself at once and decided that my disreputable looking raincoat covered with gray splashings from the roads, was the main cause of the curiosity.

By Boat to Glasgow.

Nineteen miles from Dublin is the City of Balbriggan, of underwear fame, I think. The trip through this section is over a beautiful stretch of motoring highway, which, although rolling, is probably the best in Ireland. I arrived in plenty of time to see the famous shipbuilding yards, Queens College, the courthouse, of old Corinthian architecture, and other equally interesting sights, before leaving for Glasgow, via the Burns' steamship lines. The fare, including that of the machine, was only five dollars. I arrived in Glasgow early in the morning, and as I did not wish to tarry long, I saw only the necropolis and the municipal buildings.

To Edinburgh was only a 48-mile ride, but there is a good stiff descent about 23 miles from Glasgow. It seemed as if the rain followed me around and I couldn't enjoy the beauties of Edinburgh as I wished. The Royal Scottish museum and the Botanical Garden were worth a more protracted visit, but I could not spare the time. I left Edinburgh in the evening and got as far as Hawick, 51 miles, before dark and remained there until morning. Leaving the latter town early for Preston I passed through Carlisle and saw the Brougham Castle ruins. My course lay over the London road, which was in fine shape. From Penrith I came through the English lake district, which did not impress me as being prettier than Killarney.

At Shakespeare's Home.

From Garstang I went to Blackpool, the Coney Island of England. The road from here to Liverpool through Preston is very good and I made excellent time. I called at the American Express office and obtained gloves which had been forwarded to me. I took the ferryboat from the landing stage to Birkenhead, and then followed the telephone line from there to Chester. Some of the old fourteenth century Roman walls can be seen at the latter place. My route lay through Whitechurch, Shewsbury, Wol-

verhampton and the great manufacturing city of Birmingham, and thence into Stratford-on-Avon. About eight miles from this point, I was riding very fast when I observed from the corner of my eye, a motorcyclist standing along the roadside. It was not until a few seconds later that the impression in my mind took form and I was certain that I had seen an American model motorcycle. I decided to go back and I found the rider to be W. C. Anthony, a former student at Illinois University. He had a twin Excelsior and we soon fixed up his difficulty and rode on together to Shakespeare's birthplace.

Anne Hathaway's Cottage.

Thousands of names were written on the walls, ceilings and window panes of the different rooms, among which were those of many distinguished men. It used to be the custom to write your name on the wall or ceiling until 1847, when this was forbidden. After seeing this place of great literary interest, the garden, museum, memorial theatre and grammar school, we rode to Anne Hathaway's cottage, with its vines and flower-covered gardens.

An Unexpected Meeting.

Returning to Shakespeare's home, we took a couple of pictures and then started for Warwick Castle, eight miles distant. I got a fellow to take me across the Avon River to a span of the old Roman Bridge, that I might get a good picture of this grand castle, which has one wall directly on the Avon. I couldn't think of overlooking such a historical and noteworthy university as Oxford, so I stopped in the city for quite a visit. While taking a picture of one of the buildings I was agreeably surprised to see a familiar figure pass across the range of my view finder. On looking up I met the Professor of the University of Illinois and his wife. I insisted that they remain in the foreground for the picture, which they did. After a pleasant chat I bade them goodbye and started for London, when I suddenly remembered that I had purchased an English knicker riding suit, and was to have called for it by 1 o'clock. It was al-

Previous to this I was lured into a store which advertised "American ice cream sodas." The price was twelve cents and they contain the cutest little piece of ice cream, almost the size of a hazel nut and the flavor, which was supposed to be chocolate, was as thin as cocoa. I evidently showed my disappointment, for the girl asked me if they weren't like those served in America. I left Oxford over the Iffey road and then followed the Thames valley road to London, arriving there in the usual rain, and with the wet sand from the roads covering the machine and my clothing.

(To be continued.)

OREGON DEALER'S LONG TRIP

R. A. Gaertner Visited Chief Cities in Oregon and Washington by Motorcycle to Place 1913 Agencies.

PORTLAND, Ore.—R. A. Gaertner, of the firm of Andrews & Gaertner, distributors for the Eagle in Washington and Oregon, recently combined business and pleasure on a trip through the two northwestern states. The object of the trip was to place sub-agencies in all the large centers. This journey, being the first of its kind on the Northern Pacific coast, was closely followed by many motorcyclists.

Leaving the Rose City at noon he arrived at Helens by 3 p. m., where he spent the rest of the day and remained over-night. By 8 a. m. the next morning the Eagle was well on its way to Rainier, Ore., which place was reached at 5 p. m. At this point Gaertner crossed the Columbia River to Kelso, Wash., arriving at the latter town by 7 p. m. R. D. Sullivan, of Kelso, made a bid for the local agency and is now selling the Eagle in his vicinity.

Leaving Kelso by the famous Pacific Highway, which was in good condition, Mr. Gaertner made fair time, but lost his way on several occasions due to the lack of road signs. At the village of Toledo, red clay, mud and plenty of rain greeted the traveler and caused him to seek shelter in a farmhouse. Leaving Toledo the next morning, he found a good plank roadway, which can be traversed in all seasons, leading to Centralia, at which town he arrived by noon. Here J. A. McCorkle contracted for the agency for Centralia and Chehalis. Between Chehalis and Roy a heavy fog was encountered and practically no headway was made for several hours, but Gaertner finally reached Tacoma, where he made an extensive visit and closed with the firm of Brink & Martin, for the 1913 Eagle agency.

PITTSBURGH M. C. OFFICERS.

A MOTORCYCLE club recently formed in Pittsburgh, Pa., will operate under the name of the Pittsburgh M. C. H. R. Nash was elected president; J. H. Ward, vice-president and W. J. Black, secretary.

LAST RUN OF SEASON

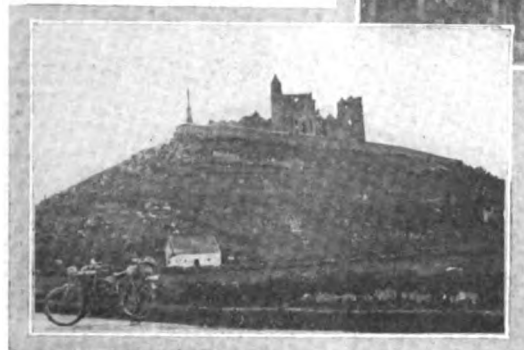
A SUNDAY run to Ipswich was held recently by the Aberdeen (S. D.) Motorcycle Club. This was the last official run of the season and a large number of members attended.

A 1912 battery model, 4 h. belt-drive Harley-Davidson was recently stolen from J. M. Rush, of DeCliff, Ohio, and \$25 reward is offered for its recovery. The machine was equipped with free-wheel control, Goodyear studded tires, and Old Sol No. 8 light.



Shakespeare's Home.

ready past that hour and when I arrived at the shop I found that the door was locked; in fact, all the stores were closed. Not knowing what to do I went to the police station and told them my story and it was not long before they had a clerk there and I received my package. It seems customary for stores in England to close at 1 p. m. on Thursdays.



The Rock of Cashel.

A YANKEE ON EUROPEAN ROADS

MAXIMILLIAN ST. GEORGE



IN the following graphic article, Maximillian St. George, who has now returned to Chicago, after an extensive European tour by motorcycle, deals with his experiences in Italy and Spain. In addition to touching at the larger cities, Mr. St. George, managed to deviate from the ordinary tourists' routes and thus pick up many points that throw light on the countries and their peoples.

As I did not care to ride over the bad roads between Naples and Rome, I shipped my motorcycle as baggage from Castellammare to Genoa. The transportation charges were a little more than \$3. I was requested to drain out all the gasoline before shipping, but no one examined the tank. A small tip to two of the guards insured good handling of my machine. As it is the custom in southern Italy to cheat the visitor whenever possible, I think it worthy of mention that I gave one Italian almost double the price of an article and was hurrying away when he called me back and returned the amount. Speaking of the tendency to bunco the visitor, I might mention a case in Bozen, Austria. I stopped at the Central Garage for gasoline and was charged \$1.32; they claimed to have put nine litres in the tank, at 65 hellers a litre, whereas the tank will hold only seven and a half litres and there were over two litres in it when I made the purchase.

As might be supposed, the scenery to Genoa was very attractive. On arriving at the latter place I was vexed to find that my magneto cut-out had been broken off, and that the tube for my pump had been stolen. The thief must have acted out of pure meanness, as he could have no use for the pump, the European valve being different from the American type. The only safe way in shipping is to take off all easily detachable parts. The lamp or speedometer may be left on, but the fact should be noted on the receipt or bill. I experienced some delay in having a special tube made for my pump.

Leaving Picturesque Italy.

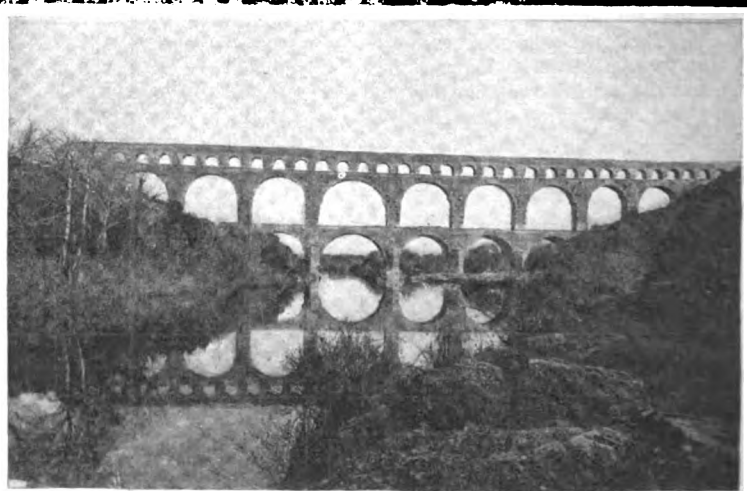
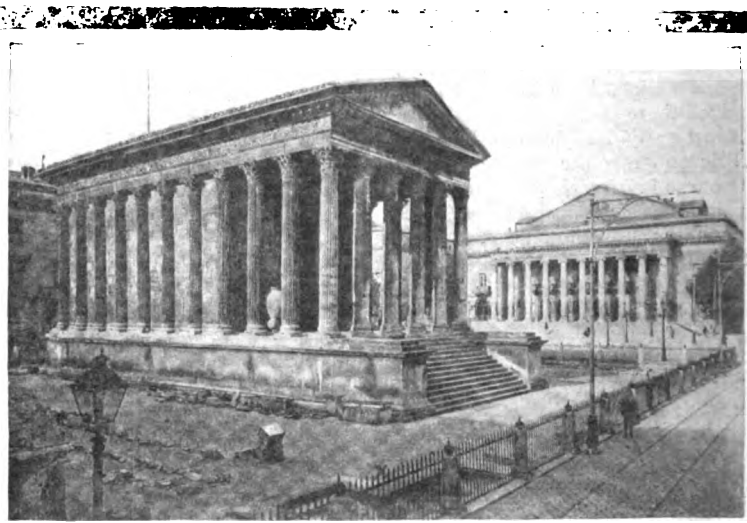
My course lay along the sea through Noli, Savonna and many other small villages, in which the road customs vary considerably. One must watch the warning at the entrance to a village in order to know which side to take. The road is by no means good, and in some places it is badly torn up. Through the villages the streets are paved with roughly layed "flagstones." In this section the scenery was not above the ordinary; in fact, it was somewhat disappointing.

I stayed overnight at an inn at St. Stefano, which like other inns in Italy was well kept and clean. The price was very reasonable. It is the general opinion that Italian hotels are poorly kept and dirty, but my experience has been that while

they do not appear inviting from the outside, the interior is usually clean. Beyond San Remo the scenery becomes quite attractive, and the roads also improve. I soon reached Grimaldi, the Italian customs station, and simply gave up my Italian permit, while the officer made a note of my exit on my International Pass. At Garavan, the French customs station, a few hundred yards further on, I presented my customs ticket for France, together with the International Pass, and in return received a permit to ride in France for three months, for which I was charged eleven cents.

Along a Sea Road.

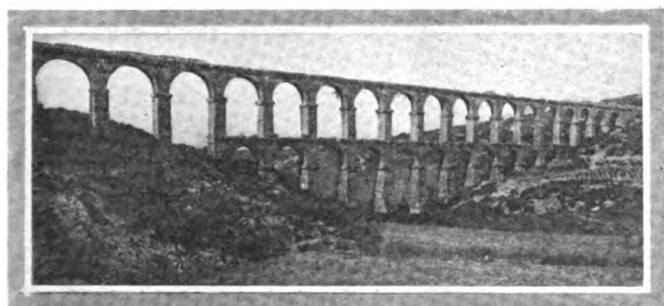
Mentone, on a promontory jutting into the bay, is the first town after passing the customs station. The old town with its narrow and winding streets, still maintains its feudal aspect. The unrivalled Corniche road hence to Nice, nineteen miles distant, via Monaco and Villafranca, passes through most exquisite coast scenery. It is much better, however, to take the ascent from Monaco to the Grand Corniche, regarded by some as the finest coast drive in the world. It passes through Turbie, Cap de Ferrat, Beaulieu and Eze, with striking scenery at each turn.



The road hugs the sea passing through Cannes, Antibes, Frejus and Toulon, thence over the Maritime Alps. About six miles from Le Muy I stopped for the night. I inquired at a couple of hotels on the main thoroughfares and found the prices to be too high, so I stopped at a smaller inn on one of the side streets. The tourist will find better accommodations at lower rates and will also be able to place his machine where he will feel free to tinker with it, at the small hotels or inns. In the morning I continued along the splendid road passing through Le Muy, Le Luc, Vaudeban, Aix, Salon, Arles, Nimes and Montpellier. At a bank in Aix I spent half an hour getting an American Express money order cashed, which requires an endless amount of red tape. Nimes is abundant in Roman ruins; the amphitheatre is in my opinion far superior to the Coliseum, in Rome. Here is located the Pont du Gard, one of the grandest Roman works in existence.

An Ideal Host.

From Montpellier, on the way to Beziers, darkness overtook me. I turned off at a branch road leading to Cette, but soon discovered my mistake. On inquiring for a night's lodging, I was directed to the Barac, I believe, an inn near Poussan, between Gigan and Meze. In all my travels I have never met a more accommodating man than the proprietor, and have never received better treatment. A large number of automobiles stop at his inn for gasoline and oil. I purchased gasoline at forty-five centimes a litre, or forty-three cents a gallon. It is always best to buy gasoline outside of towns or villages, as there is generally some sort of a duty to pay otherwise. Gasoline and oil may be purchased outside of any town at a general price of fifty-five centimes a litre, or fifty-three cents per gallon. At some places, however, the price comes somewhat higher. Unless the gasoline



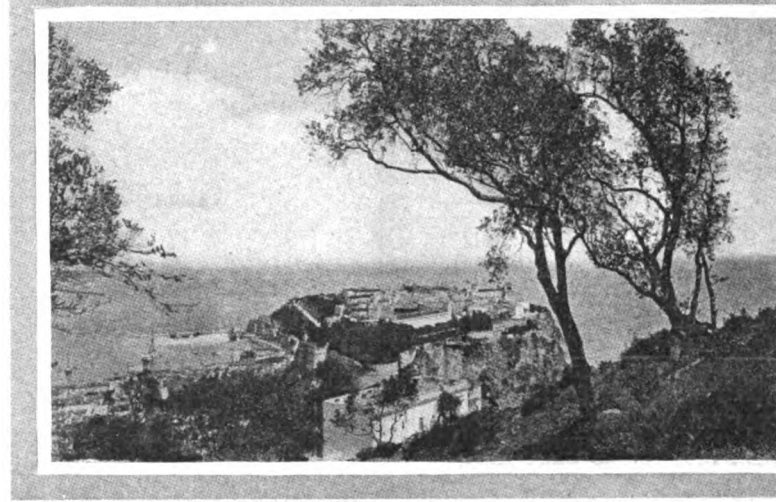
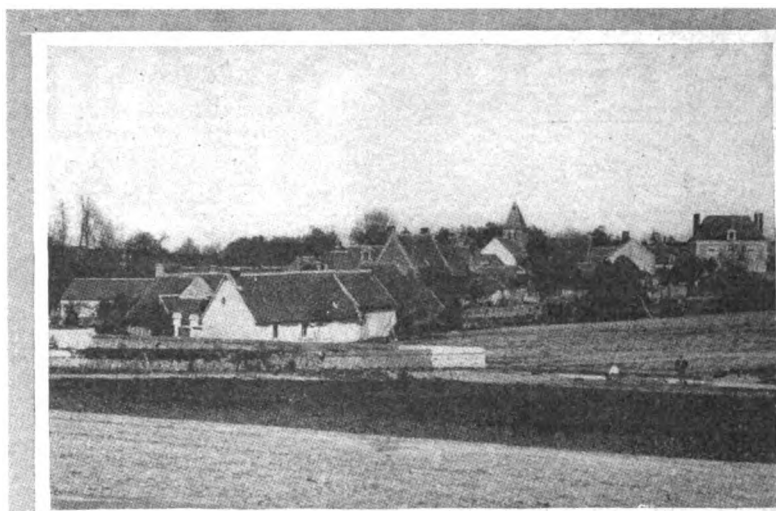
is passed through chamois the carbureter is sure to give trouble, as water and other foreign matter is often found in it.

The next morning I rode through Beziers, Narbonne and Perpignan to Le Boulou, near the Spanish border. This fine road leads through a land of vineyards, where people were busy picking the luscious fruit. I made many stops along the wayside to eat a bunch of grapes. From Le Boulou to Perthus, a six-mile ascent to the French customs station, the road is supposed to be good, but I found it rather poor and cut up. It is needless to say, however, that the scenery was beautiful.

My International Pass, papers and all my persuasive powers, availed me nothing at the Spanish customs headquarters. A deposit of three pesos was required for every kilo weight of the motorcycle. My word that it weighed 110 kilos was not questioned, but as I had not 330 pesos at the time, I offered to deposit \$60 in American gold, provided it would be returned to me on leaving Spain. This the official assented to and accordingly made out a pass allowing me to tour in Spain for one year. He forgot to charge me for the certificate, but did so on my return.

Where a Bluff Saved the Day.

A three-mile descent over splendid road brings the motorist to La Junquera, the first Spanish village. At the entrance to the village I was stopped by a soldier of the "Inspeccion de Vigilancia," and had to present my permit and papers for inspection. In going down the narrow street of the village I had the misfortune to knock a man down. I saw that he was not hurt and by putting up a bold front I was able to get off before anyone could call a gendarme. I grasped the supposed injured arm of the man, pulled up his shirt-sleeve and then told him that nothing was the matter; I drew the bystanders' attention to it and rode off. To Figueras the road is exceptionally good, but it becomes narrow, winding and very bad



to Besalu. Just outside the village I had to ride through a shallow river, ascend a very steep incline and turn sharply over a difficult bridge. Thence to Banolas and Gerona the road is again good. At the latter place I paid about 65 cents per gallon for gasoline. This is the usual price in the larger towns, but at times one has to pay as much as 87 cents per gallon. The road to Tordera continues good with few exceptions.

In the morning I continued over a poor, narrow road to Malgrat and Mataro, at which place the road widens and is again good to Barcelona. Barcelona is one of the most enterprising and beautiful cities in southern Europe. The newer section of the city reminds one somewhat of the better sections of Boston and Washington. I followed the splendid road to Tarragona, once the center of Rome's power in Spain, to visit the Marquis de la B. After a two days' visit I returned to Barcelona to see a bull-fight. I had intended to return to France by a different route, but as I had made a deposit at La Junquera, I had to follow the same course as when coming.

I should also state that I took pains to stop over with my "ideal host," the proprietor of the inn near Poussan, who was as affable as ever. There seems to be a tendency to make little of the requirements of American tourists in some sections, and when one meets a really genial host the impression received is likely to linger.

The small photograph at the left, on the opposite page, shows a characteristic Italian vista with a well-preserved castle in the background; the upper picture on the same page gives a view in Nimes, France, and the lower picture shows an impressive bridge on the outskirts of the town. The photograph at the left on this page shows the aqueduct Puente del Diablo (The Devil's Bridge), at Tarragona, Spain; the upper picture at the right is of a typical French village, and below appears a striking view of the French Riviera, the city built on the promontory being far-famed Monaco.

RECORD-SMASHING as A BUSINESS

by RAY SEYMOUR



MOTORCYCLE racing is a game of many funny kinks, and had I actually seen that unfortunate Hasha-Albright crash on the Newark (N. J.) track last September I probably would have a different story to tell today; I am of the opinion that it would be a tale of my retirement from the motorcycle racing game. I was a competitor in the fatal race, and might easily have gone down with my friends, but as luck would have it I rode clear and did not know what had happened to the other boys until I saw the red flag and stopped. Then Frank Hart, the ex-champ of the amateurs, rushed over to me and broke the news. It was a hard blow, but I had been spared a view of the accident itself, and, as I have intimated above, the latter circumstance probably accounts for my being still in the racing game.

Every motorcycle racer has scores of friends who give him advice to the effect that he should take up something safer, and I am no exception. I receive all kinds of advice from well-meaning people, and while it is all appreciated, I have not been able to bring myself to the point of acting upon it so far. My friends admit that there is good money in motorcycle racing, if you are a top-notch, but they argue that "money won't do you any good if you figure in a bad crash," and, of course, they are pretty nearly right. Still I don't worry about going down in a mix-up on the track; at least, I never did until the day of that Newark accident. Since that time I have done some serious thinking, and I don't mind saying so.

My Start as a Racer.

I was 16 years old when I started racing; that was five years ago, and I have been at it pretty steadily ever since. I was earning \$15 a week in a Los Angeles repair shop when the fever struck me. I won the first event in which I competed—a three-mile novice race, in which I had to ride my head off against two other boys. This event was held on the Los Angeles dirt track. I used a 1¼ h. Reading Standard machine in my first race, and for the next three years I stuck to machines of this make. As might be expected, I became deeply interested in racing as soon as I had won my first event, and the fact that I was employed by a motorcycle

firm in repairing and selling machines paved the way for me to compete in other contests. However, motorcycle races were not very plentiful in those days, and for some time one race a month seemed to be my limit. I was on the lookout for all kinds of racing programs, and as the sport grew in popularity I gave more attention to it. In the summer of 1909 I felt justified in taking up racing as a business, and decided to make an eastern trip. I won quite a few races in the East and then returned to Los Angeles for the winter, entering the employ of John T. Bill & Co.

During 1909 I was sent to Indianapolis by the Reading Standard folks, where I entered the National F. A. M. meet on the Speedway. It will be remembered that this meet was called off because of the roughness of the course; I entered only one event, finishing third against a field of riders of national standing, despite the fact that they were mounting special machines and my mount was of the stock type.

Hanging Up My First Record.

Some time before the Indianapolis meet I set up my first record, at Los Angeles. It was in a 10-mile amateur race, and the officials clocked me at 8 minutes and 10 seconds. I

couldn't hardly believe the time was correct, but the timer assured me that it was, and of course I was elated. During 1910 I went after the racing game hard. I found it profitable to be an "amateur," for most of the prizes I won were in the form of orders for merchandise, and I promptly turned them into cash. The F. A. M. is to be commended upon the reclassification of riders, since everybody at all interested in racing knows that trade riders were far from being entitled to classification as amateurs.

Early in 1910 I quit my job and went to Salt Lake City, where I rode as an amateur for several months. There I became well acquainted with Jake DeRosier, and he took me to Philadelphia, where I rode his famous No. 21 Indian in the championship races at the F. A. M. National Meet for that year. It was at Philadelphia that I won the amateur championship, and I believe the one-mile contest in this series is the greatest race I have ever ridden. However, that's going a bit ahead of my story.

Getting Into the Limelight.

There were races covering two days on the dusty old Point Breeze track in Philadelphia, and on the first day I came into my own against such amateur stars as Marty Graves, W. J. Teubner, E. G. Baker and Harry Nixon, on Merkels; Walter Goerke, Freddie Huyck and J. Boyd Anderson, of the Indian camp, and Frank Hart, who was then mounting a Reading-Standard. Although the newspapers referred to me as the "seventeen-year-old wonder," I had really passed my nineteenth birthday before I competed in the races at Point Breeze. Throughout the meet Jake DeRosier treated me like a son, and with his coaching I gained confidence rapidly. When the mile championship was announced I went to the tape prepared to win and lost no time in jumping into the lead.

A Great Race.

Graves, on his Merkel 7, was hot on my trail and he remained there like a leech as we spun that old triangular track. That's what made it a great race. It took everything I knew and the best that was in my machine to prevent Graves from passing me, for more than once he was on the point of doing it. As we swung out on the last turn for the mad dash to the tape we were neck and neck, but I cut in very close and nosed my opponent out by a few feet. Hart went out with a soft tire. Teubner made a bad start. Robinson spilled, and Goerke and Huyck finished third and fourth, respectively.



Ray Seymour,
Board Track
Record Holder,
Who States
That His Track

Winings for Two Seasons Have Totalled no less than \$8,000.

Some Disappointments.

In the last event of the day, the 25-mile for the 30:50 class, I went against a field of ten. Teubner took the lead away from Goerke after a great chase, which I viewed through the dust ahead, and on the sixteenth mile I brought the crowd to its feet by passing the Pottstown rider. However, I had a hard time keeping the lead, for Teubner hung on to the very last. When I was on the next to the last mile I thought of the small gasoline tank that my Indian carried, and I was afraid I wouldn't have enough "juice" to carry me across the line a winner, but it did the trick.

My first-day victories put me in a very confident mood for Saturday, and I had my cap set for the 10-mile championship and the one-hour championship, but I was a victim of tough luck, for my machine developed tire trouble when I was leading by half a mile. My fellow-townsmen of the Merkel camp—Marty Graves—captured the 10-mile title, while Anderson, on an Indian, won the hour event. During the whole day all I won was a prize for the mile time trial (59½ seconds), and third place in the 15-mile handicap, in which I was scratch against a mile and a quarter handicap given the first two men who placed.

After the "Philly" meet DeRosier and I struck out for Salt Lake City and the West, and after riding a while in Salt Lake, DeRosier, Balke and myself went on to San Francisco. The first board track ever built was in my home town, Los Angeles, and it was there that I first rode a motordrome. Late in October, 1910, I broke the world's amateur record for a mile on that track when I traveled the distance in 41½ seconds. That record held until May of this year, by the way.

In the Professional Ranks.

When winter came on in 1910 I went to work for the Hendee Manufacturing Company, in the San Francisco branch, as a salesman. I turned professional on April 1, 1911, or, rather, I was "turned" by the San Francisco Motorcycle Club. My first professional race was early in April, when I entered an event over the San José 25-mile course. Later I established the world's record for a mile on a dirt track over that course, when I covered the distance in 47½ seconds. I won every other race I entered there. During the latter part of April I visited Oakland and captured every event in which I competed. My next stop was Salt Lake City. It was there that I won forty consecutive races on my No. 23 Indian.

I won the biggest purse I ever rode for at Sacramento. It was during Jubilee Week, and motorcycle races were held on the one-mile dirt track. The race in question was for the best three out of five heats at five miles. The purses were: \$300 for first place and \$200 for second. However, I cannot boast about winning this race, or the series of races, as the only riders against me were Collins and Johnnie Albright, who did not have as fast machines as I did. I rode my first eight-valve Indian in this contest.

Beginning with February, 1912, I rode at the Stadium at Los Angeles, but a hoodoo seemed to be with me, and I won but few races; poor Eddie Hasha on an eight-valve took all the important events. At last my luck changed, and on May 17, 1912, I broke all records from one to 21 miles inclusive, and on May 24 from 21 to 30 miles, on my 7 h.

Indian, No. 35, an eight-valve model. These records still hold. I made the first mile in 36½ seconds, which was at the rate of 97.82 miles an hour, and I believe this is the highest speed ever attained by a motorcycle. Oscar Hedstrom figured it out that I covered exactly 143 feet per second in that first mile.

Winning Another Title.

I was all primed for the F. A. M. meet at Columbus in the middle of July, and when I came away I had added the five-mile professional championship to my list of titles. Eddie Hasha nosed me out of the 10-mile championship event. At Columbus I won, among other events, the three-mile open and the five-mile open races against Hasha and Graves. I left Columbus feeling that I had again shown my right to claim the professional championship, which I rightly felt heir to at Los Angeles when I broke the records in May.

I traveled back to Chicago, where I continued to win steadily all the rest of July, and about the middle of August I started an Eastern invasion, stopping off on the way to Newark at Columbus and Cleveland. It was late in August when I finally landed in Newark. The last time I rode was at Newark, in fatal race of which I spoke at the outset of my story. I was heartbroken at the loss of Hasha and Albright, two of my closest friends, and was very glad when the Indian folks ordered me to quit racing for the season. At present I am traveling for the Hendee company, and expect to keep at this until the opening of the racing season in 1913.

This story would not be complete without speaking of my earnings as a professional. I give the figures, not because I am proud of them, but because I know they are of interest, and I am not ashamed to make them public. In my first year as a professional I earned \$3,000, and for the current year I have earned \$5,000, bringing the total for two seasons' racing of three months each up to a little more than \$8,000.



Frank King, Now Among the Winning Riders on the Big Los Angeles Bowl.



Larry Fleckenstein, a Star in the Present Los Angeles Speed Squad.

MOTORCYCLES ON WARSHIP

Several Officers of U. S. S. Wyoming Have Single Trackers for Use Whenever the Big Sea Fighter is in Port.

BROOKLYN, N. Y.—Not to be outdone by their fellow officers of the Army, who use motorcycles on duty as well as for pleasure trips, Uncle Sam's naval officers have also taken to the motor two-wheeler. On board the U. S. S. Wyoming there are a number of motorcycles which are used by the officers whenever the dreadnought happens to be in port. On board the vessel the machines are stored in a special compartment, as far as possible from the magazines, so that danger of a fire is practically eliminated. When an officer desires to take a spin while the vessel is in port, his motorcycle is brought on deck, picked up by an electric crane and swung outboard to the pier or dock.

The method of slinging the machines is quite novel. A rope about one inch in diameter is arranged in a sling and fastened to the steering-head and at the seat-post. A piece of board, notched on the ends, is inserted in the sling so that the strain on the machine is in a vertical direction, and the danger of wrenching the frame of seat-post tube is done away with.

OPEN ROCKFORD ROOMS.

ALMOST 100 members and out of town guests were present at a banquet given recently by the Rockford (Ill.) Motorcycle Club to celebrate the opening of its new club-rooms. The rooms are located in the heart of the business district of the city, and occupy two floors. The members presented President Fred Sullivan with a handsome loving cup as a token of their appreciation of his good work during the last season.

ABOUT twenty riders recently participated in a secret destination run held by the Salt Lake City Motorcycle Club. A number of young ladies joined the boys on this outing.

The NEW RIMS

A little information of interest and importance to jobbers, dealers and riders, concerning the fitment of tires to the old and the new types of rims.

ALTHOUGH the adoption of a new standard of rim design and measurements will ultimately prove highly advantageous to both the trade and the riders, the change from the old to the new is bound to cause confusion in the minds of those who do not appreciate that a quite radical step has been taken. A representative of MOTORCYCLE ILLUSTRATED, who called at the Goodyear, Diamond and Goodrich plants in Akron recently, was especially urged to publish the by no means generally known facts regarding the fitment of 1913 tires to the old and the new style rims. The data published herewith, obtained from the motorcycle sales managers of the Goodyear and Diamond companies, and also a booklet, entitled "The New Motorcycle Rims," issued by the United States Tire Company, should be carefully studied by every jobber, dealer and rider.

Three motorcycle rims have been definitely decided upon for next season. They will be known as "AA," "BB" and "CC" rims.

An "AA" rim will take 26 x 1 $\frac{3}{4}$, 26 x 2, 28 x 1 $\frac{3}{4}$ and 28 x 2 inch tires.

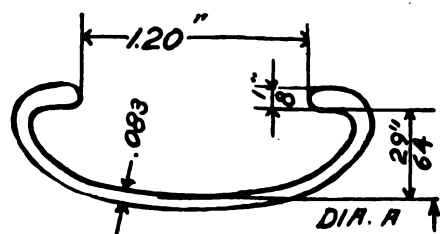
A "BB" rim will take 26 x 2 $\frac{1}{4}$, 26 x 2 $\frac{1}{2}$, 28 x 2 $\frac{1}{4}$, 28 x 2 $\frac{1}{2}$ and 29 x 2 $\frac{3}{4}$ inch tires.

A "CC" rim will take 26 x 2 $\frac{3}{4}$, 26 x 3, 28 x 2 $\frac{3}{4}$ and 28 x 3 inch tires.

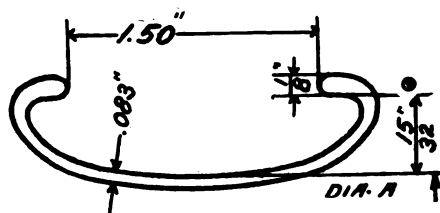
The new "A" rim will be about the same as the old 2-inch motorcycle rim, being changed a very little in profile. As this rim is used almost exclusively for racing wheels it is merely necessary to say that it accommodates 1 $\frac{3}{4}$ and 2 inch tires in 26 and 28 inch sizes.

The old rim, known last year as the 2 $\frac{1}{2}$ -inch, will take tires in the following sizes: 26 x 2 $\frac{1}{4}$ inches; 26 x 2 $\frac{1}{2}$ inches; 28 x 2 $\frac{1}{4}$ inches; 29 x 2 $\frac{3}{4}$ inches.

The 1913 output of all motorcycle manufacturers will be equipped with either the "BB" or "CC" rims. However, it will be necessary for the dealer to carry a stock of tires for the old 2 $\frac{1}{2}$ -inch rims so as to take care of the owners of old machines. In the spring it will be necessary for dealers to have a stock of tires to fit the "BB" and "CC" rims in order to take care of re-orders for tires on 1913 machines.



The "AA" Rim.



The "BB" Rim.

The following is a list of the rims which manufacturers will use on their 1913 machines.

Excelsior Motor Mfg. Supply Co. (Excelsior), "BB" rim.

Aurora Automatic Machinery Co. (Thor), "BB" rim.

Miami Cycle & Mfg. Co. (Merkel), "BB" and "CC" rim.

Emblem Mfg. Co. (Emblem), "BB" and "CC" rim.

Consolidated Mfg. Co. (Yale), "CC" rim.

American Motor Co. (M-M), "BB" rim.

Black Hawk Mfg. Co. (Black Hawk), "BB" rim.

Flanders Mfg. Co. (Flanders), "BB" rim.

Greyhound Motor Works. (Greyhound), "BB" rim.

Harley-Davidson Motor Co. (Harley-Davidson), "BB" and "CC" rim.

Henderson Motorcycle Co. (Henderson), "BB" rim.

Hendec Mfg. Co. (Indian), "BB" and "CC" rim.

Ives Motorcycle Corporation (Monarch), "BB" rim.

Minneapolis Motorcycle Co. (Minneapolis), "BB" rim.

MacLeod Mfg. Co. (Bailey Flyer), "BB" rim.

New Era Autocycle Co. (New Era), "BB" and "CC" rim.

Pierce Cycle Co. (Pierce), "BB" rim.

Reading-Standard Co. (Reading-Standard), "BB" and "CC" rim.

Schickel Motor Co. (Schickel), "BB" rim.

Triumph Mfg. Co. (Triumph), "BB" rim.

Waverly Mfg. Co. (P. E. M.), "BB" and "CC" rim.

Pope Mfg. Co. (Pope), "BB" rim.

Excelsior Cycle Co. (De Luxe), "BB" rim.

All new rims will be single clinch. Some of the tire manufacturers are making two 28 x 2 $\frac{1}{2}$ -inch tires this year, one for the old rim and one for the "BB" rim. The Goodyear company is making three 2 $\frac{3}{4}$ -inch tires—one 29 x 2 $\frac{3}{4}$ -inch four-ply tire for the old rim known as the 2 $\frac{1}{2}$ -inch rim, one 29 x 2 $\frac{3}{4}$ -inch three-ply tire for the "BB" rim and one 28 x 2 $\frac{3}{4}$ -inch three-ply tire for the "CC" rim.

Inasmuch as there is bound to be more or less confusion this season, owing to these dif-

ferent rims, the Goodyear company has gotten out a rim gauge.

It is absolutely necessary that every order given by a dealer or jobber should show whether the tires are to be used on a "BB," "CC" or the old style rim.

The United States Tire Company thus explains the difference in the new rims: "The 'BB' rim takes the place of the old 2 $\frac{1}{2}$ inch rim and accommodates 2 $\frac{1}{4}$ and 2 $\frac{1}{2}$ inch tires in 26 and 28 inch diameters, also 29 x 2 $\frac{3}{4}$ inch tires.

"This 29 x 2 $\frac{3}{4}$ inch tire is exactly the same as the old 28 x 2 $\frac{3}{4}$ inch tire which fitted the old 2 $\frac{1}{2}$ inch rim, except that we have changed the marking to read '29 x 2 $\frac{3}{4}$ inch to fit 2 $\frac{1}{2}$ inch 'BB' rim, inasmuch as the diameter is 29 and not 28 inches.

"The 'CC' rim, which will be an entirely new rim and made for use on twin cylinder machines especially, will accommodate 2 $\frac{3}{4}$ and 3 inch tires in 26 and 28 inch diameters. As this rim will be about one-inch smaller in diameter than the old 2 $\frac{1}{2}$ inch rim and will also be somewhat wider between the clinches, we will make two entirely new tires in the 2 $\frac{3}{4}$ and 3 inch section to fit this rim. On account of the rim being smaller in diameter the 2 $\frac{3}{4}$ inch tire made for this new rim will measure, when on the rim and inflated, very close to 28 inches instead of 29 inches, as is the case with the 2 $\frac{3}{4}$ inch rim. This 2 $\frac{3}{4}$ inch tire, made to fit the 3 inch rim, will be marked: 28 x 2 $\frac{3}{4}$ inch to fit 3 inch 'CC' rim."

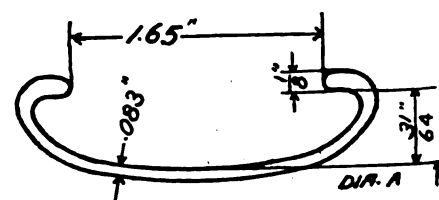
Then there will also be a 28 x 3 inch tire for the "CC" rim.

The 2 $\frac{3}{4}$ inch tires made for the two different rims are not interchangeable. Therefore, in ordering tires it is always necessary to state for what rim the tire is required.

For instance, if you want a 28 x 2 $\frac{3}{4}$ inch tire to fit an old 2 $\frac{1}{2}$ inch rim, you should so specify and your order will be filled with an old size 28 x 2 $\frac{3}{4}$ inch tire or a new size 29 x 2 $\frac{3}{4}$ inch tire, either of which will fit the old 2 $\frac{1}{2}$ inch rim.

If you want a 2 $\frac{3}{4}$ inch tire to fit the new "BB" rim you should order a "29 x 2 $\frac{3}{4}$ inch tire to fit a 'BB' rim."

If you want a 2 $\frac{3}{4}$ inch tire to fit the new "CC" rim you should order "28 x 2 $\frac{3}{4}$ inch tire to fit a 'CC' rim."



The "CC" Rim.

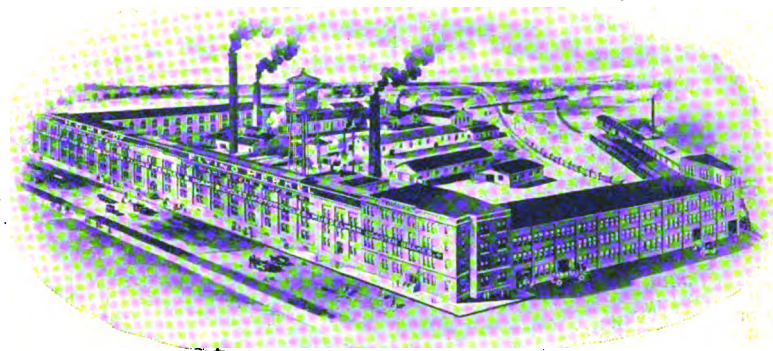


*Four Years Ahead of Our Nearest Competitor
Five Years Ahead of the Rest*

**Self-Starting
Two-Speeds**

THE FLYING MERKEL

**Spring Frame
Spring Fork**



DECLARATION!

The new and sweeping improvements found exclusively in the 1913 Flying Merkel Motorcycles mark the greatest advance yet made in motorcycle construction. They amount to little less than a revolution in the industry. All other makes are placed just about five years behind the times by comparison with the Self-Starting, Two-Speed Flying Merkel.

Read the whole story of these wonderful improvements and you will say with us: "The ideal motorcycle has at last arrived!"

Thirteen years of careful, painstaking manufacture have been necessary in order to achieve the high degree of perfection now attained in the 1913 Flying Merkels.

We have just completed an immense addition to our factory, and have filled it with nearly a half million dollars' worth of the most modern machinery in order to insure absolute reliability and perfection in this masterpiece of motorcycles.

Some of the most efficient productive engineers known to the cycle and automobile industry have been added to our staff. We have installed a new system of inspection which is the most rigid and thorough-going in existence. Because of its great cost this system heretofore has been applied only in plants making \$5,000 automobiles and high-grade watch manufactories. Every single part which enters into the construction of the 1913 Flying Merkel Motorcycle must measure accurately to the one-ten thousandth part of an inch. Our materials are the best the world knows and of special analysis.

Yet with these enormous facilities and this increased power of production we could easily double the limit of production we have set. However, we shall leave "quantity" production with its attendant short cuts and rush methods to our competitors. For ourselves, we prefer to make half as many, but **MAKE THEM RIGHT.**

The Miami Cycle & Mfg. Co.
300 HANOVER STREET
MIDDLETOWN, OHIO
MEMBER N.M.A.



POWER

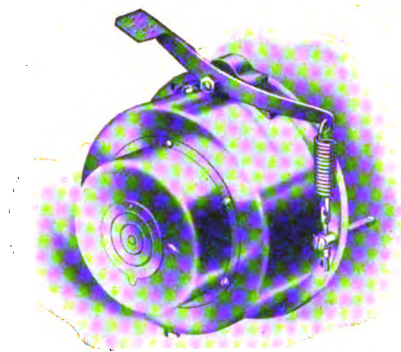


COMFORT



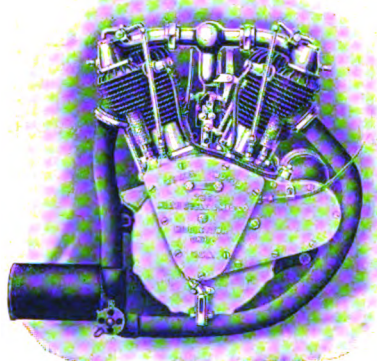
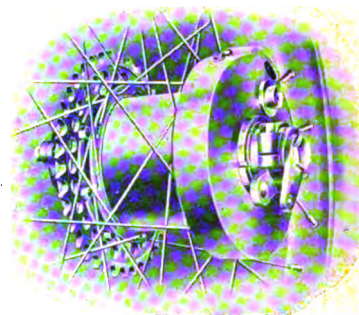


Some Flying Merkel Features



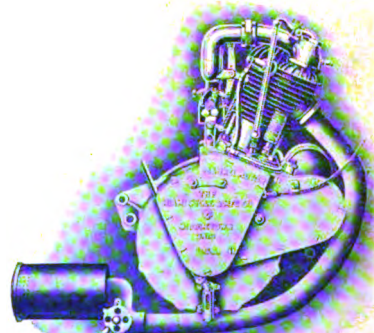
SELF-STARTER—Heretofore only the highest-priced automobiles have been fitted with this wonderful labor-saving device. The Flying Merkel Motorcycle positively will be the only motorcycle fitted with a self-starter. The adoption of a Self-Starter on a motorcycle presages a revolution in the motorcycle industry. The Flying Merkel Self-Starter is a compact device adding practically no extra weight or bulk to the machine, and is started by a slight pressure of the foot on the pedal. It is a positive acting, self re-winding starter and of the type which has proved the *only* successful starter on automobiles.

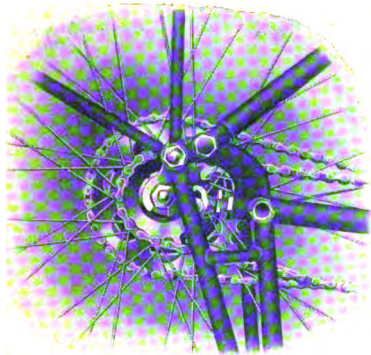
TWO-SPEED HUB—The combination of a Self-Starter and Two-Speed Hub instantly makes the 1913 Flying Merkel Motorcycle the most luxurious two-wheeled vehicle ever placed before the public. The Two-Speed gear is located in the rear hub and is of the sun and planet type. Gears are always in mesh, preventing any possibility of stripping teeth, and so designed as to be practically noiseless. The reduction is 1.5 to 1. Control is by lever at side of tank.



POWERFUL TWIN MOTOR—The 1913 motor is entirely new and more powerful, speedier and more flexible than any of its predecessors. It is a long-stroke motor, having a bore of $3\frac{1}{4}$ inches and stroke of $3\frac{43}{64}$ inches, giving a piston displacement of 60.89 cubic inches. The world-renowned Hess-Bright ball bearings are used throughout, these being of entirely new design and made especially for us in Europe. No expense has been spared in making this the finest motorcycle power plant in the world.

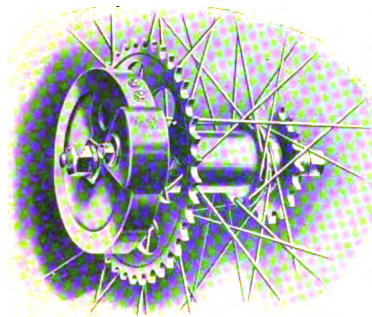
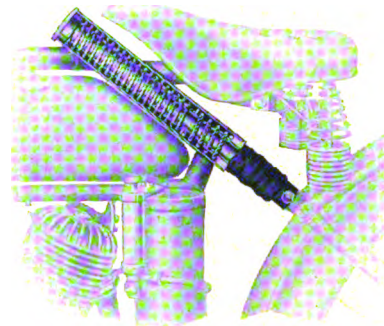
FOUR HORSEPOWER MOTOR—The single cylinder motor is identical in construction with the seven twin, with the exception of the number of cylinders. Bore and stroke are the same, the piston displacement of the single being 30.445 cubic inches. Valves on both single and twin are mechanically operated with adjustable valve tappets. The crank case, which is newly designed throughout, is made of the highest quality aluminum, beautifully polished. "The fastest and most powerful single" aptly describes it.





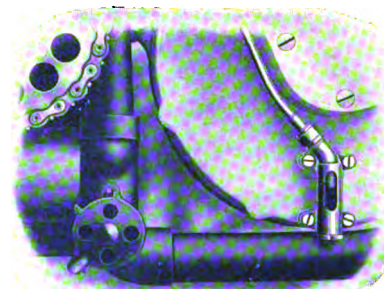
REAR WHEEL CONSTRUCTION—Every rider instantly will appreciate the value of this drop-out rear wheel construction. A puncture on the road formerly meant arduous labor in squeezing out the rear wheel, skinned knuckles and lost temper. By simply detaching the chain and unscrewing the two axle nuts, the rear wheel can be removed in an instant without disturbing the adjustment. The entire rear frame structure is of special drop forgings. A new straight line support stand of triple truss design makes this item the simplest and at the same time the staunchest stand designed.

SPRING FRAME—Of entirely new design, the 1913 Flying Merkel Spring Frame makes it still the most comfortable motorcycle in the world. One large spring with rebound spring and compensating pneumatic plunger, which is adjustable for riders of varying weights makes it possible to ride over the roughest roads with no discomfort whatever. A hinged-joint shock-absorber still further promotes easy riding. The Spring Frame and Spring Fork features alone make the Flying Merkel the most desirable of all motorcycles.



BAND BRAKE OF NEW DESIGN—All twin cylinder models will be fitted with a new and powerful flat band brake, which leaves nothing to be desired in this very necessary factor for safety. While it has the most powerful gripping surface of any brake made, its action is gradual, a feature much sought after but until now not attained by anyone. The famous Musselman Automatic Coaster Brake, so long and favorably known, will be fitted on Models 40 and 41.

MUFFLER CUT-OUT AND OIL GAUGE—This is the simplest and most effective cut-out yet designed. Easily operated by the foot, it can be instantly opened or closed and always remains in the position set. The outside oil gauge is a distinctive feature and permits the rider to see the level of oil in the crank case without dismounting. The leaky, non-transparent crank case window which it replaces is now made obsolete by the introduction of the new outside protected oil gauge.



POWER

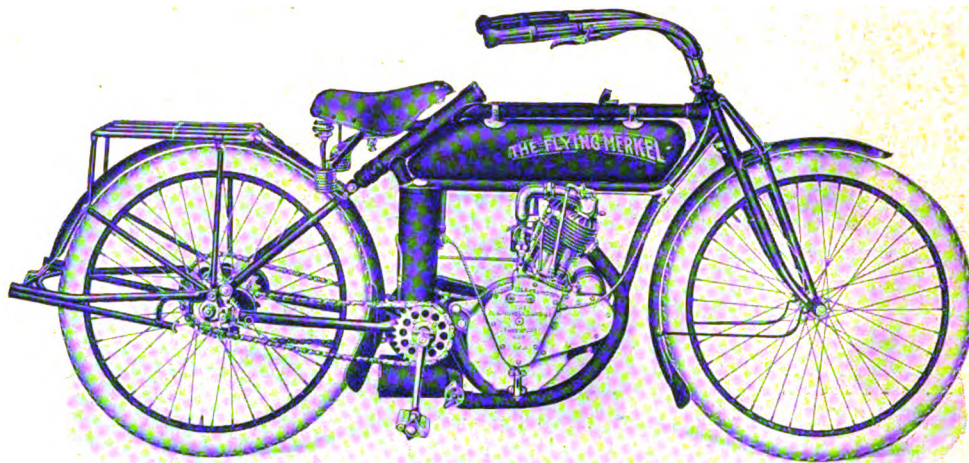


COMFORT





Model 41—4 Horse-Power, Chain Drive, \$210.00



SPECIFICATIONS

MOTOR—Single cylinder, 4 h. p. Bore $3\frac{1}{4}$ inches. Stroke, $3\frac{43}{64}$ inches. Displacement, 30.445 cubic inches. Hess-Bright ball bearings used throughout. Mechanically operated inlet valve, with adjustable tappet. Crank case of polished aluminum with new outside oil gauge.

CARBURETER—New Merkel-Schebler improved type with auxiliary air valve for high speed.

CONTROL—Merkel Patent leverless double handle bar control.

MUFFLER—Entirely new design, very compact and noiseless, fitted with positive self-adjusting cut-out easily operated by foot.

FRAME—New Improved loop design spring frame made of AAI Standard Welding tubing. Low saddle position. All working joints covered with oil and dust-proof leather jackets.

WHEELS—28 inches, 36 extra-heavy motor spokes front and rear, new type single clinch auto-type steel rims for $2\frac{1}{2}$, $2\frac{3}{4}$ or 3-inch tires.

FORKS—Merkel Patent Truss Spring Fork, a unit with front wheel—proved the safest and strongest fork in the world.

MUD GUARDS—Beaded edge, $4\frac{1}{2}$ inches wide, with leather flap front and rear.

WHEEL BASE—55 inches, making unusually easy riding machine.

TRANSMISSION—One quarter inch x $\frac{5}{8}$ -inch pitch roller chain.

FREE ENGINE CLUTCH—Eclipse 1913 improved. Operated by side lever with positive notched segment control.

BRAKE—Improved Musselman Automatic 1913 type.

SADDLE—Choice of Persons' Champion, Troxel or Mesinger Superba.

TIRES—Choice of Federal, Goodyear or U. S., 28 x $2\frac{1}{2}$ -inch.

IGNITION—Bosch, high tension, ball bearing, gear driven armored magneto.

LUBRICATION—New Improved automatic drip feed throttle control with safety latch and auxiliary left side force pump.

TANKS—Stamped of special analysis sheet steel, heavily tinned inside and out and with triple baffle plates.

GASOLINE CAPACITY— $2\frac{1}{2}$ gallons. Oil tank integral with frame. Capacity one-half gallon plus.

TOOL BAG—Metal case with burglar-proof lock, attached to luggage carrier.

LUGGAGE CARRIER—Made of $\frac{1}{2}$ -inch seamless steel tubing, with cold-rolled stamped connections and tubular braces.

PRICE—\$210.00 f. o. b. Middletown, Ohio.

Also Model 40. Belt Drive fitted with 1 1-4 in. 28 degree V type Spartan Giant belt \$210.00



POWER

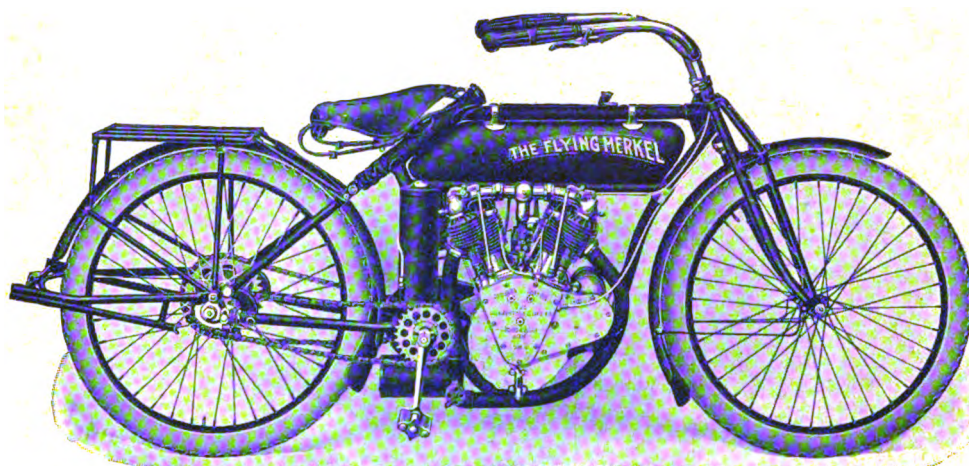


COMFORT



Model 71—7h. p., Chain Drive, With Free Engine Clutch, \$260.00

Model 70—7h. p., Belt Drive, With Free Engine Clutch, \$260.00



SPECIFICATIONS

MOTOR—Twin cylinder, 7 h. p. Bore, $3\frac{1}{4}$ inches; stroke, $3\frac{43}{64}$ inches. Displacement, 60.89 cubic inches. Hess-Bright ball bearings used throughout. Mechanically operated inlet valve, with adjustable tappet. Crank case of polished aluminum with new outside oil gauge.

CARBURETER—New Merkel-Schebler improved type with auxiliary air valve for high speed.

CONTROL—Merkel Patent leverless double handle bar control.

MUFFLER—Entirely new design, very compact and noiseless, fitted with positive self-adjusting cut-out easily operated by foot.

FRAME—New improved loop design spring frame made of AAI Standard Welding tubing. Low Saddle position. All working joints covered with oil and dust-proof leather jackets.

WHEELS—28 inches, 36 extra heavy motor spokes front and rear, new type single clinch auto-type steel rims for $2\frac{1}{2}$, $2\frac{3}{4}$ or 3-inch tires.

FORKS—Merkel Patent Truss Spring Fork, a unit with front wheel, proved the safest and strongest fork in the world.

MUD GUARDS—Beaded edge, $4\frac{1}{2}$ inches wide, with leather flap front and rear.

WHEEL BASE—55 inches, making unusually easy riding machine.

TRANSMISSION—One-quarter inch x $\frac{5}{8}$ -inch pitch roller chain.

FREE ENGINE CLUTCH—Eclipse 1913 improved. Operated by side lever with positive notched segment control.

BRAKE—New Flat Band Brake.

SADDLE—Choice of Persons' Champion, Troxel or Mesinger Superba.

TIRES—Choice of Federal, Goodyear or U. S., 28 x $2\frac{3}{4}$ -inch.

IGNITION—Bosch, high tension, ball-bearing, gear-driven, armored magneto.

LUBRICATION—New Improved automatic drip feed throttle control with safety latch and auxiliary left side force pump.

TANKS—Stamped of special analysis sheet steel, heavily tinned inside and out and with triple baffle plates.

GASOLINE CAPACITY— $2\frac{1}{2}$ gallons. Oil tank integral with frame. Capacity, one-half gallon plus.

TOOL BAG—Metal case with burglar-proof lock, attached to luggage carrier.

LUGGAGE CARRIER—Made of $\frac{1}{2}$ -inch seamless steel tubing, with cold rolled stamped connections and tubular braces.

PRICE—F. O. B. Middletown, \$260.00.

Also Model 70 Belt Drive fitted with 1 1-4 in. 28 degrees V-type Spartan Giant belt \$260.00



POWER

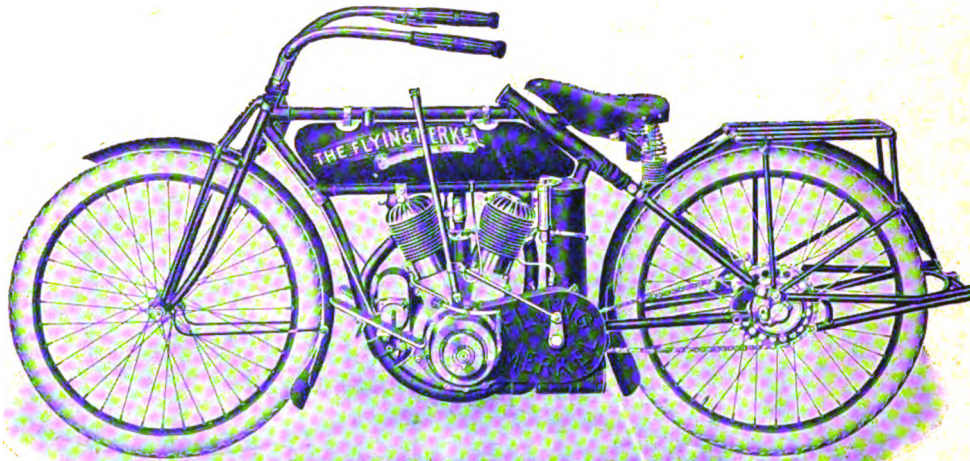


COMFORT





The Most Wonderful Motorcycle in the World



Model 75—7 h. p. Self-Starting, Two-Speed, with Foot Boards . . \$335.00
 Model 45—4 h. p. Self-Starting, Two-Speed, with Foot Boards . . \$285.00

SPECIFICATIONS

MOTOR—Self Starter, Merkel Patented, Twin cylinder, 7 H.P.; Bore, $3\frac{1}{4}$ inches; stroke, 3 43-64 inches. Displacement, 60.89 cubic inches. Hess-Bright ball bearings used throughout. Mechanically operated inlet valve, with adjustable tappet. Crank case of polished aluminum with new outside oil gauge.

CARBURETER—New Merkel-Schebler improved type with auxiliary air valve for high speed.

CONTROL—Merkel Patent leverless double handle-bar control.

MUFFLER—Entirely new design, very compact and noiseless, fitted with positive self-adjusting cut-out, easily operated by foot.

TWO SPEED—Merkel Patented in rear hub, giving reduction of 1.5 to one. Operated by side lever with positive notched segment control.

FRAME—New improved loop design spring frame made of AA1 Standard Welding tubing. Low saddle position. All working joints covered with oil and dust-proof leather jackets. Fitted with foot boards.

WHEELS—28 inches, 36 extra heavy motor spokes front and rear, new type single clinch auto-type steel rims for $2\frac{1}{2}$, $2\frac{3}{4}$, or 3 inch tires.

FORKS—Merkel Patent Truss Spring Fork, a unit with front wheel, proved the safest and strongest fork in the world.

MUD GUARDS—Beaded edge, $4\frac{1}{2}$ inches wide, with leather flap front and rear.

WHEEL BASE—55 inches, making unusually easy riding machine.

TRANSMISSION—One quarter inch x $\frac{1}{4}$ inch pitch roller chain.

BRAKE—New Flat Band Brake.

SADDLE—Choice of Persons' Champion, Troxel or Mesinger Superba.

TIRES—Choice of Federal, Goodyear or United States, $28 \times 2\frac{3}{4}$ inches.

IGNITION—Bosch, high tension, ball bearing, gear driven armored magneto.

LUBRICATION—New Improved automatic drop feed throttle control with safety latch and auxiliary left side force pump.

TANKS—Stamped of special analysis sheet steel, heavily tinned inside and out with triple baffle plates. Gasoline capacity $2\frac{1}{2}$ gallons. Oil Tank integral with frame. Capacity one-half gallon plus.

TOOL BAG—Metal case with burglar proof lock, attached to luggage carrier.

LUGGAGE CARRIER—Made of $\frac{1}{4}$ inch seamless steel tubing, with cold rolled stamped connections and tubular braces.

Price, F. O. B. Middletown \$335.00
 Also Model 45, Self-Starter, Two-Speed, Chain Drive . . \$285.00

\$100.00 IN GOLD

Models 75 and 45 are the most wonderful motorcycles ever offered to the public, and to make them justly famous all the world over, we will give \$100.00 in gold to the reader of this paper who submits the most suitable name. There are no strings to this contest. Anyone can enter it, and each entrant may submit as many names as desired. Simply write the names on a sheet of paper and mail to the Miami Cycle & Mfg. Co., 300 Hanover St., Middletown Ohio.

A committee of five has been selected to decide the winner. The contest will close at noon, December 15th. The Flying Merkel, "Autocrat," "Rambler," "Tourist," etc., are some of the titles already submitted, but they lack ginger. Read the specifications carefully and send in your selections. YOU have as good a chance as anyone to win the \$100.00. Get your friend to help you. Remember, the contest will close on Dec. 15th at noon.

TO DEALERS—The 1913 Flying Merkel Motorcycle will be the most popular machine on the market. If you have not already done so, it will be to your interest to wire today for terms and territory. Next week may be too late.



POWER



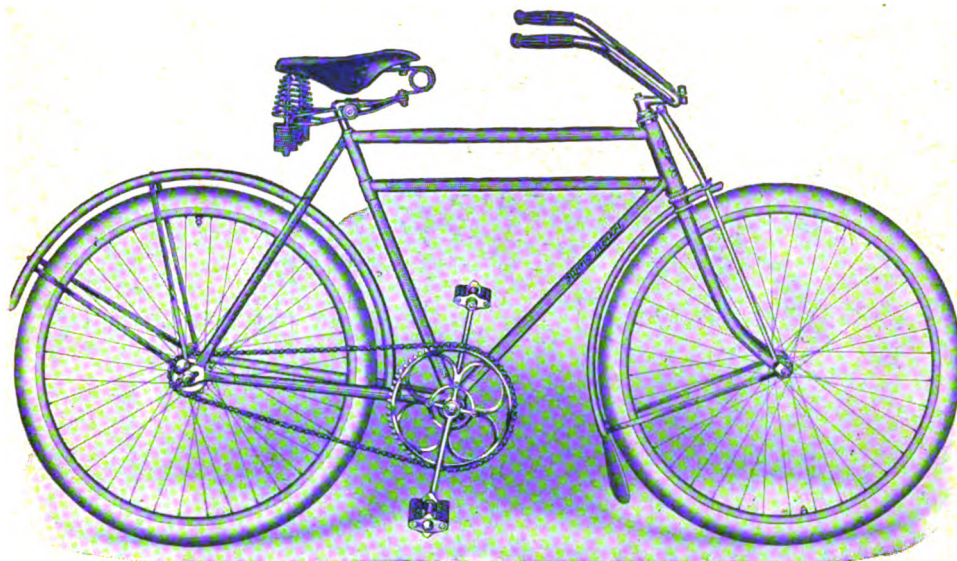
COMFORT



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



The Flying Merkel Bicycle — Model 345 — Price, \$45.00



SPECIFICATIONS

FRAME—20, 22 and 24-inch. Made of one-inch cold rolled seamless steel tubing throughout, with oval rear stays and offset rear forks. With extra $\frac{1}{8}$ -inch bar running parallel with top bar. Joints are flush with extra long heavy fish-mouth reinforcements.

FORK—Truss construction, Motorcycle Type, with three plates, and heavily reinforced seamless stem sides; enameled to match frame.

CRANK HANGER—The Flying Merkel 2-piece, Tool Steel Cones, made of Micyc Tool Steel of special analysis. Bearings are enclosed in a sleeve.

NOTE—The Flying Merkel Crank Hanger is made under our D & J Patents, which thoroughly cover a bicycle crank hanger with the ball cups enclosed in a steel sleeve, with the buttons opposed.

SPROCKETS—Front, 60 tooth. Rear, 18, 20 or 22 tooth.

WHEEL BASE—45 inches. Tread, $4\frac{1}{2}$ inches.

COLOR—Flying Merkel Orange, double fine line black stripes. Option, Merkel Blue with gold stripes.

WHEELS—Rims are made of selected

Michigan Hard Maple, well seasoned. Finish, orange with black stripes to match frame; 36 heavy Diamond E spokes .092 gauge are used in both front and rear.

HUBS—Merkel self-oiling, turned from solid steel bar with $\frac{1}{4}$ -inch balls.

CHAIN—Half-inch pitch, Roller, $\frac{1}{8}$ -inch, Diamond No. 65. American made.

TIRES—Federal single clinch, $1\frac{1}{2}$ inch. Option, Federal 666 or Fisk 66.

HANDLEBAR—Motorcycle Type, 21 inches wide, $6\frac{1}{2}$ -inch drop with forged stem, $3\frac{1}{2}$ -inch extension. Option, Kelly or Hussey, Models 1 to 6, inclusive.

SADDLE—Eagle Easy with nickel-plated spring. Option, Persons' Overland or Troxel 30-U.

PEDALS—Motorcycle Type with Rubbers.

SEAT POST—8 inches x $\frac{13}{16}$ inch, Seamless steel with drop forged top.

TOOLS—14-inch frame pump, adjustable wrench, oil can and crank wrench. Wrench and oil can in a neat leather pocket case.

GUARDS—Steel front and rear with Leather Flap. Guards are enameled to match frame, and fastened with double flat steel braces, nickel-plated.

COASTER BRAKE—Musselman Automatic.



POWER



COMFORT



Flying Merkel — Model 330 — Price, \$30.00

SPECIFICATIONS

FRAME—20, 22 and 24-inch, double bar. Main frame is made of one-inch cold rolled seamless steel tubing, with oval rear stays and offset rear forks. Flush joints, heavily reinforced. Drop forged, arch crown, stem and sides heavily reinforced, crown nickel-plated.

CRANK HANGER — One piece Diamond Faced.

SPROCKETS—Front, 28 tooth; rear, 10 or 11 tooth.

COLOR—Flying Merkel Orange, double fine line black stripe. Option, Merkel Blue with Gold stripes.

WHEELS—Rims are finished in Orange with fine line black stripes to match frame; 36 spokes front and rear.

HUBS—Merkel, turned from solid steel bar.

CHAIN—Diamond, 3-16 inch, 1-inch pitch.

TIRES—New Oxford, 1½-inch. Option, Diamond Unicorn.

HANDLEBAR—Ideal Type, 22 inches wide, 3-inch drop, adjustable, with leather grips.

SADDLE—Stretched leather, Union T. Option, Troxel Star with coil springs.

PEDALS—Rat Trap Standard.

SEAT POST—6-inch x 13-16 inch.

TOOLS—Hand pump, wrench and oiler, leather tool case.

GUARDS—Steel front and rear. Enameled to match frame.

COASTER BRAKE — Musselman Automatic.

The Miami Cycle & Mfg. Co.
300 HANOVER STREET
MIDDLETOWN, OHIO
MEMBER M.M.A.

POWER

COMFORT

DRESSING *for* WINTER TRIPS *The* OLD SCOUT

NOW that the chilly breezes of winter begin to make their presence felt, many a rider will regretfully put his motorcycle into dry-dock until the approach of another season, unless, of course, he is so fortunate as to live in a region where the two-wheeler is in its glory throughout the year. Still, you will find a constantly increasing number of enthusiasts who refuse to give up the sport on account of wintry breezes, or even snow. Any person, however, who contemplates cold weather riding should make due preparation—indulging in a lengthy spin in a freezing temperature may be attended by very serious results.

If one has good red blood in his veins, there is a certain satisfaction to be derived from a motorcycle jaunt when the mercury is hugging the bottom of the tube. The cold, bracing atmosphere acts like a tonic, and though the sharp, invigorating sting of the air as it zips past may make ears and cheeks tingle, the sensation is not altogether unpleasant; always considering, of course, that the rider is properly dressed for the occasion—a light weight suit and thin underwear were never meant for winter motorcycling.

A Timely Warning.

In the first place, if you are not strong, physically and constitutionally, don't try any cold weather stunts. A rider who comes back from a two-hour trip chilled to the marrow, blue-lipped and shivering, had best leave this phase of the sport alone. It takes a good amount of vitality to face a winter gale without being chilled through and through, and

no one can afford to take chances with his health.

Nor should a person attempt cold weather riding when not in good trim; that is, when feeling run down and out of sorts. Many people are more or less subject to colds, and if you happen to have a cold, just postpone the trip till it has passed by. When you have a cold, your system is ready to take a good grip on any disease germs that may be floating around.

You might gather from the foregoing that I am opposed to cold weather riding; but I am far from such an idea. Still, I do realize the danger that may be involved, and since so many persons—motorcyclists included—are likely to be careless in these matters, it is just as well to pen this brief warning.

Where Protection Is Needed.

The most vulnerable portions of our anatomy are the feet, neck, and chest. In motorcycling, care of the feet is not so important, as they will get a fair degree of warmth from the hot engine. Nevertheless, it is a good idea to have a pair of extra heavy woolen socks for these occasions. I am a regular crank on the subject of warm clothing for outdoor work of this kind; its importance has been driven home to me on various and sundry occasions.

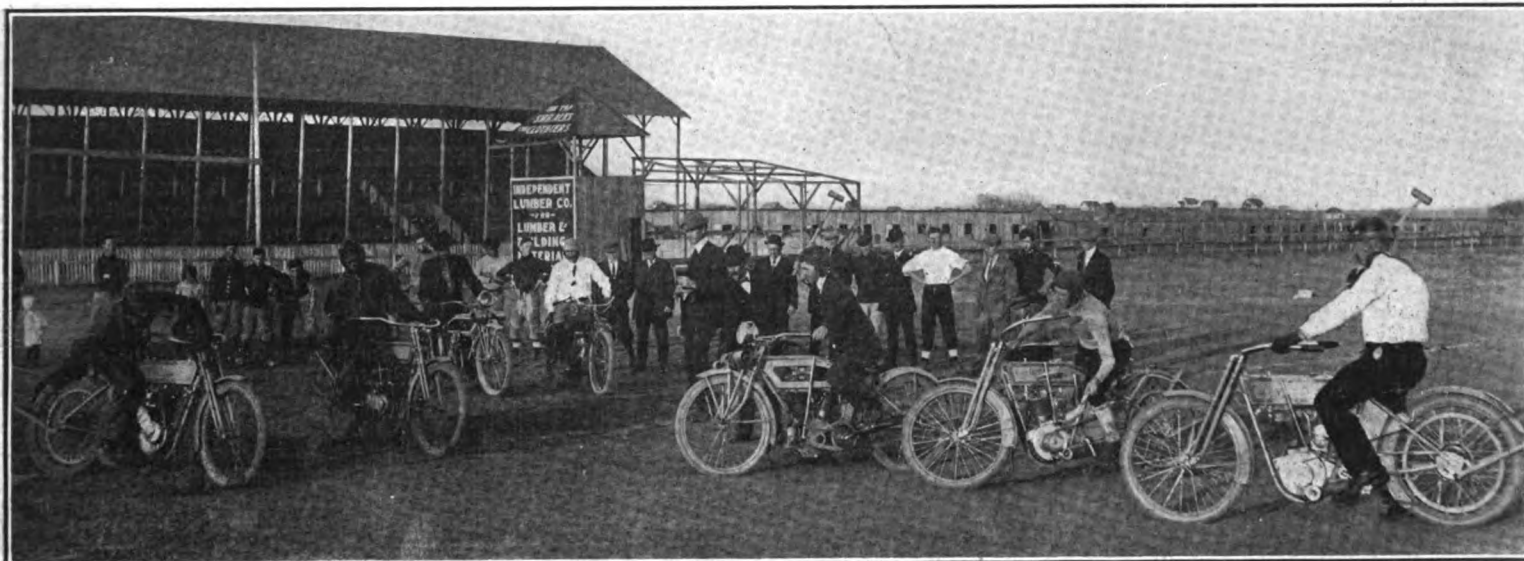
The woolen socks, leggings, and heavy underwear—the heavier the better—will probably afford sufficient protection for the lower parts of the body, but no amount of woolen sweaters or shirts will prevent the cold wind from striking through to the chest. A chamois vest

is practically impervious to the wind, but not many riders happen to own one; I don't, anyway. Fortunately there is a substitute almost as good, and a thousand times easier to procure—simply a newspaper folded across your chest and held in place by a common vest buttoned up over it. There is really more warmth behind that newspaper than in a thick woolen sweater, because wind will go straight through the pores of the cloth. Don't laugh; give the newspaper stunt a trial. Of course, you can put as many sweaters over the paper as you wish, and they'll do much toward keeping you warm, but the newspaper does more than its own share of the work.

A Pointer on Gloves.

It is not a bad plan, if the weather is frigid, to put on a short overcoat over all the rest, provided you happen to have an old one that is big enough. In my own case, there is hardly room for anything more over the mess of duds that I crawl into; but you may be sure that I keep warm and comfortable and enjoy the ride, no matter how cold it is.

The common gauntlet gloves are not proper members of our cold weather outfit; they are a little better than nothing as a protection to the hands, but that is all one can say for them. I usually discard gloves entirely in my cold weather forays, wearing instead heavy woolen mittens with long wrists—regular teamsters' mittens. And even with them my fingers manage to get cold sometimes, so that I am compelled to stop and hold them up to the genial warmth of that portable stove, the engine.



MOTORCYCLE POLOISTS.

PRESIDENT B. J. PATTERSON, of the F. A. M., forwards the accompanying photograph of a motorcycle polo game, undoubtedly one of the most extraordinary views ever obtained with the motor two-wheeler occupying the center of the stage. It will be noted that the players use quite hefty mallets and that headguards are required.

That it requires skill of a high order to wield the mallets without beheading a fellow rider or figuring in frequent smash-ups will be evident at once, and only the most daring and experienced motorcyclist should consider motor polo as a pastime.

President Patterson points out that polo players who use horses are often seriously injured through collisions, but he argues that

no motorcycle poloist will risk demolishing his machine for the sake of a spectacular play. In other words, great caution is necessary, and that the riders of Pratt, Kan., and vicinity possess this quality as well as all the other essentials, is proved by the fact that they have already indulged in a number of spirited games without a serious accident. President Patterson appears at the right.

In winter riding goggles are an absolute necessity; they are really needed for warm weather riding, but in the winter one simply cannot get along without them for any length of time. And since the subject has come up, it might be proper to remark that altogether too many of the fraternity fail to supply themselves with goggles in all their riding. Some fellows seem to think—goodness knows why!—that wearing goggles is a sign of weakness, an effeminate thing to do. Occulists will tell you that eye troubles are becoming more and more frequent among people who ride much in automobiles. Not only is the steady rush of air, and the pressure thus caused, very injurious, but the dust and impurities add to the damage which may be done. Good eyesight is too precious a possession to be risked needlessly, and the eyes are too delicate to stand much abuse. The moral is easy to find: get a suitable pair of goggles and use them; especially in cold weather, for the eyes are very susceptible to a cold gale.

Warm Cap Completes the Outfit.

And finally, don't neglect a protection for your ears, for they are also very susceptible to cold. Personally I have never experienced an ear ache, but from what people say who have had such an experience, I should judge it is something earnestly to be avoided. A good heavy winter cap—the folding kind that can be pulled down to cover the ears and back of the neck—is a fine investment for any motorcyclist who hankers after the road in mid-winter.

It does not seem that any person could question the value of the following suggestions, which are the result of four years' riding experience. Doubtless many motorcyclists have already been convinced of the need of proper clothing in cold weather, but my personal observation would indicate that there are not a few who require a waking up, and an attack of pneumonia is a mighty poor sort of alarm clock. There is a lot of fun in winter riding, but at any cost keep warm.

DOCTORING THE FROST-BITTEN MOTOR

Some Pointers and a Warning or Two for the Motorcyclist Who Puts His Machine to the Test of Icy Winds and Slushy Roads.

BY WILLIAM HETHERINGTON, JR.

AFTER the motorcyclist has toggled himself until he is prepared to face the icy blasts that sweep over winter roads, he should turn his attention to the mount upon which he depends for his cold-weather excursions. There is not a great deal to be done in this direction, but a few wrinkles may be found worthy of attention. For example, it is possible on some types of motorcycles to modify the exhaust pipe or pipes so that three branches may be tapped from the exhaust; when this can be done one branch may be run conveniently near the seat so that the rider who finds his fingers getting numb on the road may "toast" them a bit without leaving the saddle. By running a branch of the exhaust to either pedal-rest the same heating principle may be applied to the rider's feet. In such arrangements the machine owner must use a reasonable amount of common sense, of course, and the idea will be found quite practicable.

The winter rider should also give special attention to his oiling arrangements. It is generally known that the standard brands of summer oil will not give the desired results in cold weather, but too many riders neglect this point. When the motor sticks, as an effort is made to turn it over on a cold day, it is probably because the oil has gummed, owing to its thickness. A considerably lighter grade of oil than is used for summer work should be bought for winter riding.

Getting the Cold Motor Started.

Formerly it was splendid exercise to start a cold motor by pedalling, but this has practically been done away with. Sometimes, however, the engine will refuse to "take notice" and there is trouble. This may usually be avoided if the rider will squirt a little kerosene into the pet-cock or plug aperture when he dismounts. If this is done the engine will start quite easily, although it may be thoroughly chilled when it is desired to get under way again.

As a motor will always start more easily with a warm air supply it may be found advisable to run a tap from the exhaust pipe

to the air intake on the carburetor for winter riding, so that warm air will be fed. In addition to providing for an easier start this system should permit of smoother running of the motor. If it is not practicable to warm the air in this way, the rider who finds his engine suffering from chronic "non-starteritis" may place a few drops of ether on a cloth and hold it against the air intake, thus producing a mixture that will start almost anything. A piece of warm waste held over the air intake has also been known to give surprising results.

Preventing Generator Trouble.

The winter rider often finds when his lamp is most needed that the water in the generator is frozen, but he may usually avoid such an emergency by placing a few drops of alcohol in the water. If the water is already frozen the rider may utilize his exhaust pipe to thaw it, or the troublesome generator may be held under the muffler.

More than once when using the separate generator type of lamp I have obtained water by melting some snow, thus supplying the generator and avoiding dangerous night riding without a light. However, it is a poor policy to rely entirely upon this type of lighting system for winter riding; it is far safer and just about as economical to fit a combination system.

NEW CANADIAN CLUB.

AT a recent organization meeting of the motorcyclists of Welland, Canada, the Welland Motorcycle Club was formed and the following officers were elected: C. C. Warner, president; S. D. Dunn, vice-president; E. T. Schmall, secretary-treasurer. D. F. Forbes, E. Lambert, C. C. Warner, S. D. Dunn and E. T. Schmall compose the executive committee. Members were also appointed for the publicity, touring and racing committees. The club has affiliated with the Canadian Motorcyclists Association.

LEE HUMISTON took every race in which he was entered at the Los Angeles Stadium on November 17.

YALE ADVERTISING COUNSEL.

THEODORE F. MACMANUS, advertising counsel for the Yale, occupies a unique position in the motorcycle industry, as he is the man behind the big campaign of national advertising that the Yale is pushing. MacManus is retained by the Yale in practically the same way that a lawyer is retained for legal advice. He is the head of the MacManus Co., the big advertising agency in Detroit and Toledo. This idea, although a new one in the motorcycle field, has been proved successful by experience with one or two big automobile concerns. MacManus is at present giving similar advice to the Studebaker corporation, and much of the success of the Cadillac Co., is due to Mr. MacManus's publicity work for them at an earlier period.

Mr. MacManus has been acquainted with automobile and motorcycle developments for several years, and in this way has acquired a very intimate knowledge of the sales advertising problems that arise and the best ways in which to meet them. It is the expert



knowledge born of this wide experience and the unusual ability of the man as an advertising writer that makes his experiences so valuable.

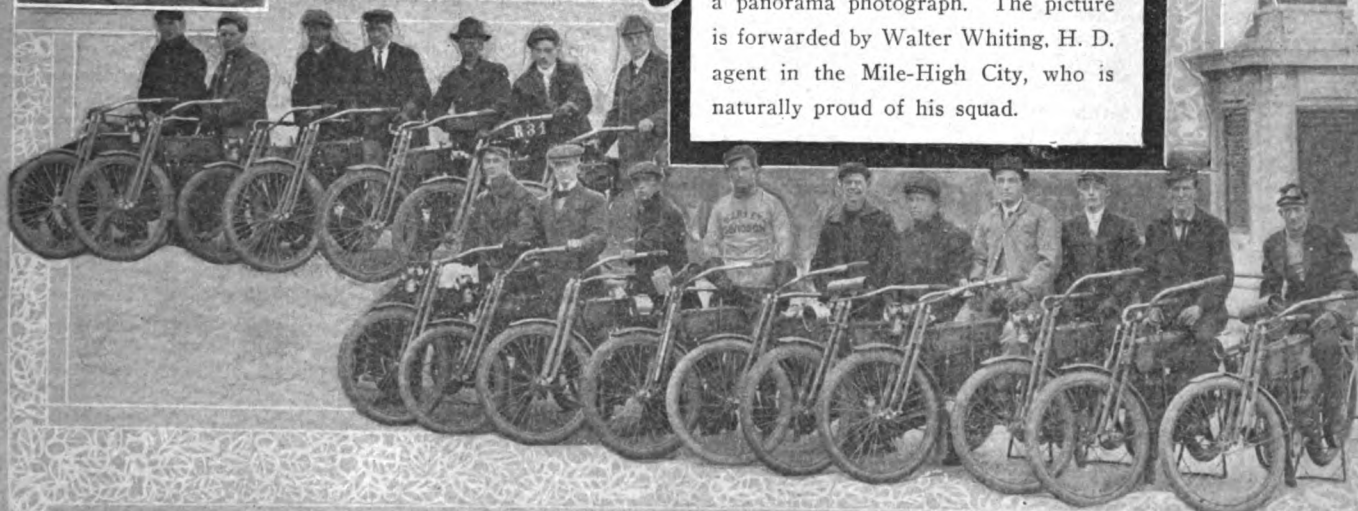
INDEPENDENT BOSCH DISPLAYS

ANNOUNCEMENT is made that the Bosch Magneto Company will not exhibit its products at either the New York or Chicago Shows, owing to the fact that the division of spaces for the annual displays did not permit of satisfactory arrangements by the company. The spaces assigned were entirely too small to accommodate the extensive Bosch exhibits and to permit the company to entertain its many visitors at the shows, so it has been decided that the products of the firm will be shown independently at the New York and Chicago headquarters of the company. The New York display will be found in the spacious quarters at 223-25 West 46th street, and in Chicago the exhibition will be at the company's branch on 24th street, near Michigan avenue. At both establishments special arrangements will be made to entertain visitors and to display the many types of Bosch ignition products, over two hundred in all.

LEWIS STROH, of Indianapolis, Ind., has completed a 15,000-mile motorcycle trip through the southern states and reports having spent only \$2.75 for repairs.



SEVERAL score Harley-Davidson riders of Denver, Col., who recently posed for a panorama photograph. The picture is forwarded by Walter Whiting, H. D. agent in the Mile-High City, who is naturally proud of his squad.



MOTORCYCLE ILLUSTRATED

Published every other Thursday at 51 Chambers Street, New York. Home Subscriptions, \$1; foreign, \$2. Ten cents a copy.

J. LEO SAUER
President

EDITORIAL VIEWPOINTS

THURSDAY
NOV. 28, 1912

Entered as second class matter July 6, 1908, at the Postoffice at New York, N. Y., under act of Congress, March 3, 1879.

H. N. CONDUCT
Secretary

NINETEEN THIRTEEN.

ABOUT a year ago, the writer ventured the prediction that 1913 models would show practically no price reductions, but rather disclose a disposition on the part of manufacturers to give the rider more value at the same prices. The prophecy is being realized with a vengeance. And in this connection we must also admit that another prognostication, made as late as two months ago, has proven to have been quite inaccurate. Unable to understand how the builders of motorcycles could give much more for current prices, we felt quite certain that this year's improvements would be limited to refinements only. Instead, one finds set forth in 1913 announcements a delightful array of radical changes for the better. Nine out of ten of the 1913 improvements have been introduced specifically for the purpose of adding to the rider's comfort and of simplifying and rendering easier the operation of a machine. Very little that the auto owner can enjoy will be beyond the reach of the users of 1913 motorcycles. The latter will have motor power in excess of all possible requirements; two-speeds to wipe out the erstwhile twin terrors—hills and sand; wonderful spring frames and other shock absorbing devices; well-nigh perfect control systems, including ingenious devices which will rob the starting problem of all its former tribulations—in sum and substance, powerful, reliable, dependable, handsome and comfortable pieces of mechanism, beautifully and cleverly designed, stanchly built annihilators of space.

The 1913 motorcycle bids fair to prove one of the real big sensations of the coming twelfth month.

F. A. M. IS READY.

OUTLAWRY with reference to the operation of board tracks was discussed in a frank manner between the F. A. M. directors and several motordrome promoters and owners at the St. Louis session a fortnight ago. To all appearances, nothing remains of the movement which, it is now known, was seriously undertaken several months ago. It seems that the board track people have come to the conclusion that co-operation with the F. A. M. is not only good sport, but good business as well. There is less disposition to deprecate the value of F. A. M. influence, aid and protection, and promoters are anxious to sign long-term contracts with the governing body. No secret is made of the fact that a big break-away had been all but arranged, but the half-hatched plan to "go it alone" on a "strictly business basis" is now admitted to have been a stupid conception. That is, by the best element in the board track promotion field, and this element is now at the top of the

heap. There may be a dissenter or two, and among them someone determined to try to throw over the organization. The Federation's position, however, is remarkably strong at the present time, and no fear is felt of the result of any outlaw attack that may now be in the making. None is in prospect just now; still the F. A. M. is ready.

ENTIRELY UNCALLED-FOR.

CHAIRMAN THORNLEY, of the F. A. M. Competition Committee, might do well to give notice that he will in the future, decline to entertain any proposition to rush through a restrictive board track agreement. The telegraphic vote taken on a recent application was nothing short of ridiculous. As a matter of fact, it produced a mess which only a special meeting of the directors could have possibly cleared up. The members of the board have had their lesson, and they may be depended upon to insist upon something better than a snap vote upon a question of such importance. In other words, promoters will find it to their advantage to have their applications in Chairman Thornley's hands at least thirty days in advance of the date on which they contemplate starting to build. In many instances, there has been more than one application for the same city, and the directors have been called upon to judge as between two or more applicants over-night, as it were. On the face of it, this is an absurd procedure, and it is quite safe to predict that there will be no more of this unseemly haste. The directors have made it quite plain that they do not propose to have promoters force them to decide until they have had a reasonable opportunity to carefully study each situation.

THE F. A. M. DIRECTORATE.

MEETINGS of the F. A. M. Board of Directors should be held at least quarterly. The business of the organization has developed to such proportions and importance as to demand that the directors "get together" at reasonable intervals. The results of the St. Louis session were easily worth ten times the outlay required to pay the actual traveling expenses of each member of the board in attendance. Matters which had been hanging fire for a month or more under the handicap of the exigencies of correspondence were disposed of without the slightest difficulty at the St. Louis meeting. Another session should be held during either the New York or Chicago Show, preferably the latter.

THE SECOND-HAND MACHINE.

IT'S no longer young, this suggestion, but timely withal. We address ourselves to the several thousand dealers in the United States, and would warn them against the

temptation of making ridiculously high allowances for second-hand machines taken in part payment for new models. A comparatively small number of agents have reduced this exchange business to a scientific system, insuring them satisfactory profits, but it is doubtful whether any of them could explain their systems so that another would understand. They succeed, however, because they steer clear of the haphazard methods which too many dealers, in their anxiety to make sales, practice in all parts of the country. How many dealers are there who make adequate provisions for a reasonable return on their investments, in addition to a proper salary for the labor and thought they contribute to the business? The aggregate of their sales may reach comfortable proportions and still pay practically no dividends over and above the owner's actual earning capacity. We believe that the indiscriminate acceptance of junk at absurd prices is more than anything else responsible for this condition of affairs. The clever dealer makes it an almost invariable practice to at least break even on machines taken in exchange. Why shouldn't he? The old machine has a certain value which any dealer of intelligence and a little experience can estimate almost to a dollar. That figure should be the dealer's dead line. Surely the rule is simple enough, yet how few dealers seem to understand that its constant infraction is positively menacing to the success of their business?

Second-hand machines will soon appear by the thousands. Their number is not likely to be any greater than that of those who are prepared to pay reasonable prices for used machines. Please note that we say *reasonable* prices. If the dealer allows much more on the average exchange, the second-hand market will pass him by in a body, as it were, and make its purchases from the agent who can sell at value prices, because he doesn't allow more than value on machines taken in exchange.

It's all so very simple, and yet how many will refuse to be guided by the rules of the only safe and sane policy of conducting an agency? It is quite probable, however, that, having learned by rather expensive experiences in 1911 and 1912, at least several hundred dealers will shy clear of the unbusiness-like exchange "system" in the future.

HARRISBURG OUTING.

A LARGE attendance marked the recent sociability run of the Nomad Motorcycle Club, of Harrisburg, Pa. The trip was made to York by way of Middletown, Mt. Joy, Marietta and Columbia, and returning the party passed through Wellsburg, Dillsburg and Mechanicsburg.

GUARANTEED
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& WAYSIDE COMMENT

SUBSCRIBERS
In more than 2,300
Cities and Towns in the
United States and
Foreign Countries.

DENVER WANTS IT.

DENVER enthusiasts want the 1913 F. A. M. meet. Although the 1912 National Assembly adjourned only four months ago, the Denver boys have already placed themselves on record as prepared to guarantee a big fund and an attractive program. The meet has never been held west of the Mississippi, and although San Francisco is practically slated for the 1915 gathering, Denver's bid for the 1913 honor will undoubtedly be given serious consideration by the directors. A number of the Middle Western cities will again be in the field, but the prospects favor either the choice of a city in the Far West or one in New England. At any event, any opposition to Denver will have to be unusually strong and well organized to defeat the worthy aspirations of the Queen City folk.

UNCLE SAM'S O. K.

AFTER a series of exhaustive tests, the Postoffice Department of the United States government announces its intention to purchase twenty-five motor three-wheelers for city use in the collection of mails. Taking it for granted that these machines will give satisfactory service, hundreds more will be put into use during the next two or three years. The fact that the government has satisfied its critical requirements is the best proof obtainable that the motorcycle delivery van has demonstrated its commercial value. The field is one of huge dimensions and great promise. As yet, its possibilities have merely been guessed at. If ever the manufacturers satisfy the demand for pleasure machines, they will still always have ahead the pleasant prospect of interesting in commercial motorcycles the thousands of business folk who appear quite ready for practical demonstrations.

OUR MISTAKE.

AN amusing "deadly parallel" appeared in our issue of November 14. In the advertising section, on one page appeared a piece of copy referring to "twelve thousand readers of MOTORCYCLE ILLUSTRATED." On the opposite page was a similar advertisement reading "thirteen thousand." The first copy was an inadvertent repetition of an advertisement which originally appeared six weeks ago. In the interval, the circulation of this paper had passed the thirteen thousand mark. It's no exaggeration to state that even we sometimes lose track of the circulation growth of MOTORCYCLE ILLUSTRATED. The odd discrepancy above referred to proves it.

OUR AFFECTIONS SECURE.

STRANGE as it may seem, some representative English manufacturers and riders who have been pioneers in developing and introducing the motorcycle are now in danger of being lulled into at least temporary forgetfulness of the motor two-wheeler by the siren song of the cyclecar. There is evidence of this tendency in the British Show which opened at Olympia on November 25. Cyclecars are everywhere, and while the list of motorcycle exhibitors is as imposing as in any previous year there are indications that something has been sacrificed in behalf of the Show debut of the cycle-type fourwheeler.

ON this side we are at a loss to catch the present English drift. We look upon the cyclecar as a snappy and quite presentable little vehicle with claims to relationship in both the motorcycle and automobile families, but there is no danger of our permitting it to curtail the affection we lavish upon the single-tracker, even though the cyclecar boom should be communicated to this country as has been predicted. We believe the motorcycle has its own field, safe from the encroachment of even the tidiest of cycle-built fourwheelers, and that the recent extraordinary expansion of this field will continue. American cyclecars may come in time, but it is our opinion that they will not cause our motorcycle manufacturers a single uneasy moment.

TIMELY POINTERS.

IN another section of this number will be found timely articles on dressing for winter motorcycle trips, and doctoring the motor for cold-weather traveling. These are phases of the sport which no all-year enthusiast can afford to overlook. Winter riding has charms all its own, but they are dependent to a great extent upon warm togs and a motor that has been tuned up a bit for the special service that is to be demanded of it.

THERE STILL IS TIME.

ANOTHER option on 800 square feet of additional space has been taken by the Chicago Motorcycle Show committee, which means that there is still hope for the latecomers. Better get on the wagon; it's out to break a few records this year.

HERE is November twenty-eighth and some of our manufacturers have placed fifty per cent. of their 1913 outputs. 'Twould take a mightily sprightly calendar to keep pace with 'em.

IN 1912 it has been the "Big 4." Nineteen-thirteen will see the "Big 5." featured in hundreds of motorcycle markets. One wonders whether five is the limit of a single cylinder's capacity for horsepower. Or will there be, some of these days, a one-lunger "Big 6"? Seems impossible, but who knows?

LOOKS as though we shall have to revise upward, as Payne, Aldrich and their fellow conspirators did the tariff, our estimates of a 1913 production of 100,000 machines. However, there's at least no danger of an over-supply.

JACK PRINCE proved himself a master of the gentle art of oratorical persuasiveness at the St. Louis meeting of the board of directors. The irrepressible track builder won his case by a mile. No wonder he's such a screaming success as a promoter.

NO DOUBT about it—1913 will be a sidecar year. What with clutches universal, two-speeds nearly so, and power to spare, the three-wheeler is sure to come into its own in America.

FIFTY to one hundred per cent. increase in production will be the rule for 1913 in plants manufacturing motorcycles, tires, parts and accessories. Can anyone imagine a better rule?

EXPORT departments are now the order of the day in the organization of American motorcycle factories, their foreign business having outgrown their respective domestic sales forces.

THE fact that the Newark board track sold for \$9,500 at auction would seem to indicate that there is still hope for motorcycle racing in the New Jersey city.

WHAT a relief to have racing and its more or less exquisite et ceteras confined to a handful of tracks during these quiet, peaceful months of winter.

"BELT or Chain?" The topic has a rather familiar sound. Where have we heard that question discussed before?

THERE is much to be said for the foresight of the youth who files an early application with Santa Claus for a 1913 motorcycle.

ANENT nineteen-thirteen's big business: "We told you so."

ENGLISH NOTES "BRITISHER"

The Cyclecar Dominant—Variable Gears — Weatherproofing—Mixed Transmissions—Automatic Carbureters — Decompressors — Larger Tires—The Humber Three-Speed Model and a Type of Collapsible Sidecar.

THE mammoth British Show evinces only two features which a shrewd prophet would not have outlined twelve months ago. One is the decompressor, a tiny detail fitting, which a casual survey of the Show might have missed altogether, and yet destined to be of no small help in popularizing motorcycling as a practical means of locomotion among the non-athletic. It enables a rotund "drummer" of sixty years to do his journeys on an 8 h. twin road racer, free from qualms about starting troubles, for with a decompressor in action the heaviest twin quits the owner's doorstep as gently as a liner leaves the quay.

Fitted to passenger outfits, it obviates the danger of backfires, and makes the pullover of a high compression 1,000cc. engine a job which an intelligent child of six can perform. It seems likely to weaken the kickstarter, so popular in England last fall; for the kickstarter was apt to jam up with mud, and owing to the necessity of throwing its sprockets out of gear, the chain sometimes got lost through disalignment. With a decompressor fitted—and they are cheap and simple and reliable—any engine is easy to start. The other innovation—and it is a big one, fraught with infinite possibilities—is the cyclecar. This 1912 Olympia Show will be remembered in the history of the industry as the birthday of the cyclecar. Over a hundred different makes are on the roads and the market, the Cyclecar Club is duly launched, and a journal specially devoted to the newcomer's interests, published its first issue on November 25.

Great Confusion of Design.

IT is impossible to give any complete notion of cyclecar design, or even to prophesy with confidence which notions are likely to survive. At the bottom of the list we find simple French vehicles, scaling only three or four hundred-weight, and selling at about the price charged by high-grade makers for a two-speed twin-cylinder motorcycle. Such designs have an aircooled engine, carried in the bows of a long, narrow tandem-seated chassis, singly sprung in front by a sliding pillar with tension and compression coil-springs threaded over it; sprung astern by semi-elliptics steered by reels and wire cables, driven by belts and expanding pulleys, which drop the belt through onto a ballbearing ring to get a free engine.

The Refined Rudge.

SUCH a design can only have a fleeting popularity in a country where precipitous hills are common, and where users expect a certain measure of refinement, and hope for prolonged wear in spite of rough usage. The English improvement on this French prototype is well exemplified by the Rudge, which has a refined chassis, with a slipper type of body, multiple disc clutch on the engine shaft, chain drive to a counter shaft, and variable pulleys transmitting the drive to a solid rear axle, beltdrive being relied upon to spare the tires in corner work. At the other extreme we find a vehicle like the Singer, which is simply a luxurious automobile in miniature, with four-cylinder water-cooled monobloc engine, shaft drive, three-speed B. N. D. steel gears, cone clutch, mechanical lubrication, gate change, differential axle, detachable wheels—vide the 5,000 dollar car specification. Between these extremes there is every possible variety.

Friction Disc Drive.

A DESIGN with possibilities is that incorporating friction disc drive, of which there are several examples. Friction disc drive has pauperized many an inventor and capitalist, when applied to heavier designs, but the prolonged successes of the 8-10 h. G. W. K. cyclecar show that it has possibilities on a chassis weighing no more than a quarter of a ton; and the simplicity and cheapness with which it provides a free engine, reverse gear, and infinite variable forward speeds, ranging from say 3 to 15 to 1, is strongly in its favor. If we must prophesy, it is probable that the new trade will soon settle down into the hands for half a dozen leading firms. The most popular type will be the ultra-light spider quad, on motorbicycle lines, with small, highly

efficient air-cooled single-cylinder engine, slipper body, and belt drive through variable pulleys to a solid axle.

Economy Will Count.

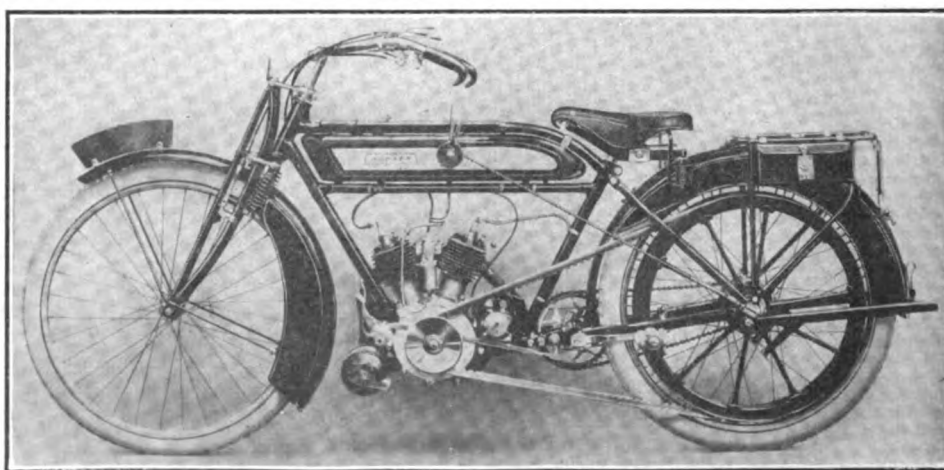
SMALLER outputs should be retained by the sounder intermediate designs, notably the pick of the tubular chassis with V water-cooled twin engines and friction drive. At the top end of the list the miniature automobile will hold its own; it offers most of the delights of full-size motoring with extreme economy of upkeep; for the tire bill of a 5-cwt. four-wheeler will be only a quarter of the same item as charged against a 15 h. one-ton automobile.

Some Motorcycle Details.

IN two respects which widely yell for improvement, British design remains tolerably stagnant, namely springing and lubrication. The original motorbicycles had rigid forks, and about 1901 spring forks began to appear. These forks have been gradually improved, and saddles have been made more efficient, but no other springing improvements have really been standardized. The weight and the want of lateral rigidity common to all spring frames have so far proved insuperable obstacles. The original motorbicycles had splash lubrication, oil being poured by hand through a plug in the crankcase every 20 miles; except that a pump has been substituted for the bottle, lubrication remains practically unaltered. The drip sight-feed is gaining ground, but can only be regarded as a makeshift. The mechanical oilers introduced up to date are not regarded with favor on this side.

Transmission the Main Interest.

HOWEVER, in respect of transmissions there are huge advances. Variable gears are absolutely standard on every single make. It may be questioned whether either of the leading types of gear will hold its ground for more than twelve months. The favorite gear is the three-speed hub, made in two patterns, each of which incorporates a multiple-disc free engine clutch: these hubs are fool-proof, light, cheap, and reliable. The solo pattern has its direct drive on middle ratio, and with a $4\frac{1}{2}$ -in. engine pulley and 18-in. beltdrum, affords gears of say, 3, $4\frac{1}{2}$ and 7 to 1;



The Humber $2\frac{3}{4}$ h. Three-Speed Model.

by adjusting the engine pulley, higher or lower series are instantly obtainable. The sidecar patterns drive direct on top, and with a 4½-in. engine pulley and 18-in. beltdrum, afford gears of 4½, 7½ and 9, reducible to 6, 9, and 12, for difficult country, by adjusting the engine pulley.

These gears have got any two-speed gear beat to the limit, by dint of the usefulness of their intermediate ratios; but they have drawbacks. They make the rear wheel awkward to remove for tube or cover changing; and they put weight in the wrong place, and make the rear half of a frame more bounceable than ever; in spite of this they are steadily pressing the two-speed gear off the market in all its forms. They will yield in turn to the three-speed countershaft gear, which puts weight in the right place (central to the wheelbase), and does not obstruct the removal of the rear wheel, while it further makes a combined or "two-step" transmission a very simple proposition. British riders retain their old prejudice against a complete rigid transmission, whether chain or shaft, but they are losing faith in the direct belt drive, because the rubber belt has ousted the leather belt completely, and the rubber belt slips like fury when it is wet, and is run off a small engine pulley.

The Combined Drive.

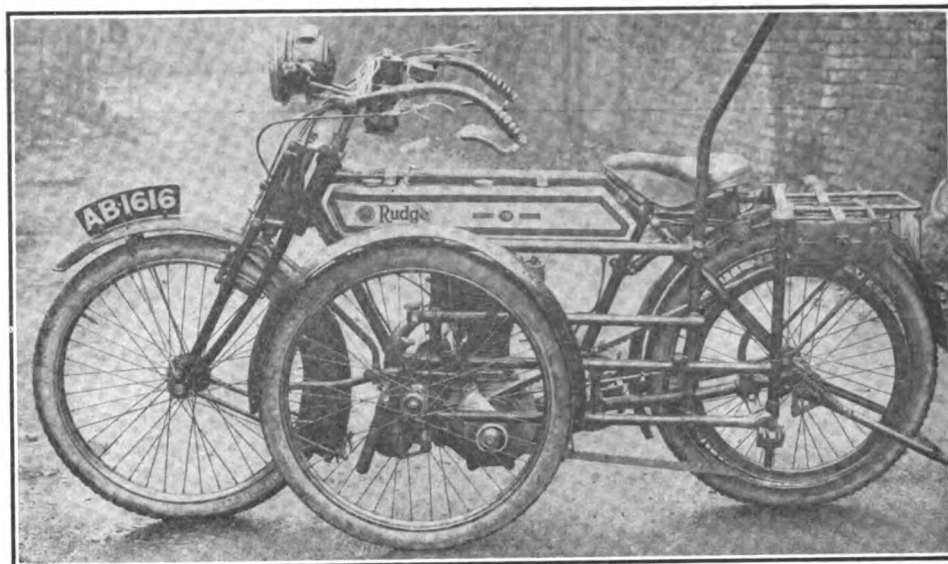
THE booming transmission of the moment employs a chain with a 50 per cent. reduction from the engine to a countershaft, which may or may not carry a gearbox. The chain is neatly encased in a box made either of aluminum castings or of steel pressings; if aluminum, the split is vertical, and the front half is made swiftly detachable; if steel, the split is horizontal, and the lower half may hold an oil bath. These cases are unpopular because of their bulbously ugly appearance; if scolloped, they look well, but admit dirt. Consequently it is more than possible that the primary chain item of these two-step drives will give way to an *enclosed shaft drive* from engine to countershaft. This should wear better than a chain item, and its slender case will not spoil the appearance of the machine, which is a great factor in England. There are one or two examples already on the market, and they seem to be satisfactory.

Simplified Carbureters.

THE growth of automatic and semi-automatic carbureters is due to two factors. The old school of athletic and sporting riders still cling to the two-lever carbureter, and maintain that its efficiency is unbeatable. But there is now a strong infusion of elderly utilitarian riders in our ranks, men devoid of speed proclivities, and asking only for an automatic machine. The carbureter this growing army wants is either a single-lever type, or a two-lever type, of which the air-lever is only shut for starting or very slow running. Simultaneously the cyclist likes an accelerator pedal control, so he too asks for a single-lever type; and consequently the two-lever type is fading into the background.

Some Details.

BRAKES remain as they were; the front brake is designed not to be too powerful, for fear of accidents, and is usually of the tire-rim type, operated by flexible wire from the left handlegrip. The rear brake is a pedal operated shoe on the beltrim; on chaindriven machines, a dummy beltrim is fitted for braking purposes only. Coaster hubs and bandbrakes are anathema to British riders, and some of the new chain-driven machines have



An English Sidecar Which is Collapsible, to Economize Storage Room.

toggled internal expanders, resembling the rear hub brakes of an automobile. The magneto advance is normally worked by a flexible wire, from a radial handlebar lever, though a few firms retain tank levers. Frames are rigid, with costly and luxurious saddles, and forks sprung by two pairs of hinged links, acting against compression and tension springs. The front wheel has a stand, which when out of use serves as extra stays for the front guard, which is boxed in round the tire, and has a backflap. The frame has double top tubes, with the tank fitted between them, sometimes hung on slips, sometimes bolted to flat ears brazed to the lower tube.

Motor Construction.

THE cylinder can in all cases be removed with the crankcase in position, sufficient clearance being left for it to be slid off forwards, with the connecting rod at the back of the crankcase, and the piston at the foot of its stroke. Engines remain unchanged; 85 mm. bore x 88mm. stroke, mechanical side-by-side valves, two-ring piston, roller bearings to the big-end, plain phosphor bronze bush for the gudgeon pin, and ballbearings for the crankshaft being recognized practice. There are a few overhead inlet valves about, but the automatic inlet would be shooed out of the Show.

The magneto is gradually being removed to a higher position behind the cylinder, on a platform cast integral with the crankcase; it is chain-driven, and slots in its platform allow for chain adjustment. The carbureter is mounted astern on the cylinder, with a very short inlet pipe which is dead horizontal. Pedalling gear is scrapped, a kick-starter or decompressor or handle being preferred; a few firms retain pedalling gear in lieu of kickstarters, but only as a starter, not as a propeller.

General Equipment.

BELTSHIELDS are not unknown, when the direct belt drive is retained. The carrier is made of steel tubing, with brazed joints, and carries the rear mudguard, which widens out to bear the registration numbers on its tail. Pannier toolbags are bolted to the carrier sides by bent plates, bolts and D nuts, which cannot under any circumstances shake adrift. Nickelplating is giving way to black stoved enamel; the handlebar, and some accessories, are covered with a skin of black celluloid, on

a few leading machines. Cone-adjusted wheel-bearings are the more popular. The pivot of the rear brake is usually brazed to the frame before enameling; sometimes the whole tube is treated with a patent rust-preventing process, known as Coslettizing, prior to enameling. Black is still the popular finish.

The size of the tires is being steadily increased, but few of our makers copy the wise Hendee lead of combining 28-in. wheels with a low frame, although a 28-in. wheel is more comfortable on rough roads; 26-in. remains the standard wheel diameter, but the cross section of tires is being raised. Last year 2¼-in. tires were standard; this year we see 2¾-in., 2½-in., and even 3-in. commonly fitted, usually with a butt-ended tube, and rubber-studded tread.

Prices Going Up.

MACHINES are not listed complete with horn, lamp and speedometer, such accessories being left to individual taste, though the concluding pages of most catalogs quote for fittings suited to the machine. Prices are rising, rather than falling, owing to the inclusion of free engines and variable gears. A complete roadster specification of high class costs nearly 300 dollars. There is a distinct increase in the number of small twin-cylinder machines, averaging from 2¼ to 3 h., as the prevalence of three-speed gears has made a reduced engine power able to cope with stern traveling; but the cognoscenti mostly eschew the tiny engines (with a few exceptions), as their light construction does not permit of so high a standard of efficiency or of power maintenance. The big twins of 5-8 h. are losing ground rapidly, and most riders make their choice between a 350cc. twin and a 500cc. single. These machines are far more handy and docile in ordinary use than a heavy overpowered twin, and are actually more manageable on precipitous hills and bad roads, for their low gear ratios make them quite as good climbers as a 9 h., while their lower speed and light weight are suitable for trick riding round stony hairpin bends.

F. A. M. MEMBER 19,000.

BUENAVENTURA CARBO, the American Vice and Deputy Consul at Cienfuegos, Cuba, received F. A. M. No. 19,000 on November 15.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.
5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.

6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.

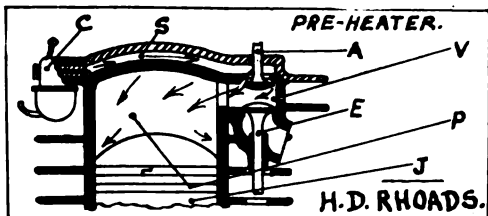
7. At least one dollar will be paid for every suggestion published.

8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

Competitors in the Motorcycle Improvement Contest, and prospective contributors should note that the last improvement suggestions will be received for publication in the issue of December 26, and that the announcement of prize winners will be made in the following issue, that of January 9. Communications and drawings, to be eligible for consideration, must be in this office not later than December 20, so that they may be judged with the final suggestions to be published in the December 26 number.

PRE-HEATING DEVICE.

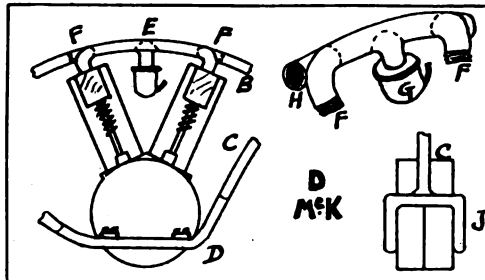
THERE are many advantages in pre-heating the mixture before it enters the cylinder of the motor, and in air-cooled motors the exhaust is usually by passed into a jacket surrounding the mixing chamber. A suggestion is here made in which the same effect is obtained by the fitting of a passage over the head of the cylinder, the carbureter being mounted at one end of the passage and the other communicating with the valve chamber. C is the carbureter, having a needle-valve



opening directly into the passage S; V is the valve chamber and A and E the inlet and exhaust valves respectively. The piston is shown at J, and P is the combustion chamber. The heat from the cylinder head, pre-heats the mixture as it goes through the passage. Contributed by H. G. Rhoads, Akron, Ohio.

TUBE MANIFOLD AND HANGER.

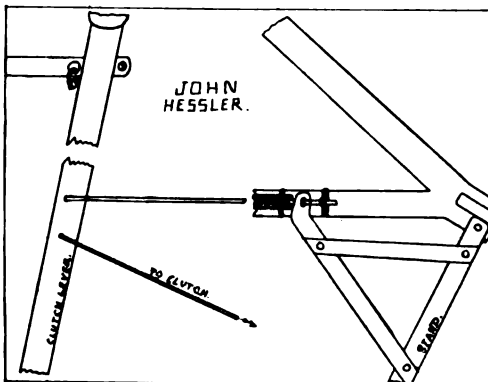
THE brace tube is suggested as being made in three parts, the middle to form the inlet manifold for a twin motor. This is shown at E and has plugs H at its ends. From each end of E are short pipes F, F, which are fitted to the valve chambers, while the carbureter is connected at G. The whole section



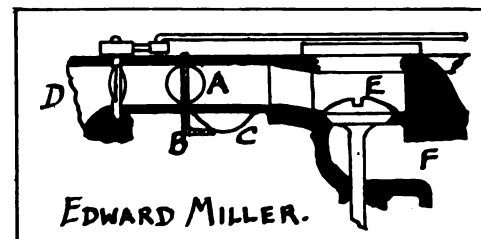
of the tube is connected by a pair of threaded collars to the other sections of the brace tube. The down tube C has a U-shaped cradle J in which the motor-base rests by means of four feet, two on each side. This piece is shown at D in the side view. Contributed by Derlin A. McKindless, Baltimore, Md.

SAFETY DEVICE.

TO the clutch lever is fitted a rod whose other end runs through guides along the rear fork of the motorcycle. The end of



the stand arm has an eye formed on it and the rod end passes through this eye and fits in a clip as shown. When the clutch lever is "out" the stand can be lowered, but when "in" it cannot be lowered. A padlock fitted in a hole in the clutch quadrant will lock the whole device in the position shown, and the machine can only be carried away bodily, as it cannot be taken off the stand. Contributed by John Hessler, Paulding, Ohio.



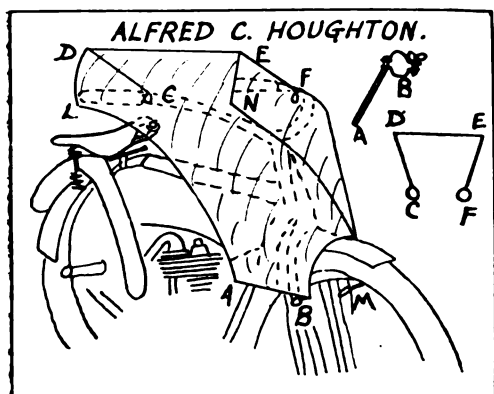
SAFETY THROTTLE.

TO prevent unauthorized use of a motorcycle, an auxiliary throttle is suggested. The inlet pipe is drilled through and the butterfly throttle A fitted therein, on a bent stem B. A spring C holds the throttle in either the open or closed position. D is the carburetor, E the inlet valve and F the cylinder. When leaving the machine, throttle A is closed, and being put in an inconspicuous place will hardly be noticed. Any attempt to go off with the machine will be fruitless, until this throttle is opened. Contributed by Edward Miller, Chicago, Ill.

RAIN AND WINDSHIELD.

A COMBINED wind and rain shield which covers the rider from the knees to the chest is the subject of a suggestion herewith. AB is a brass rod attached to the end of the

canvas shield and clamped by nut and wing nut to the fork. C, D, E, F is a frame of brass tubing, fitted to the handlebars at C and F in a similar manner. The canvas B, A, L, D, E, N, M is hooked to the various corners of the frame C, D, E, F. K is a slot in extension of clamp B and takes one end of rod AB. To remove: slacken thumb nuts at C, F, B and M and lift



off rods AB at both forks. Roll up rods AB in canvas and fix roll to DE by rubber bands. Swing frame forward till it lies across front of handlebars. Tighten up nuts at C and F. Unfold in the reverse manner. Contributed by Alfred C. Houghton, Detroit, Mich.

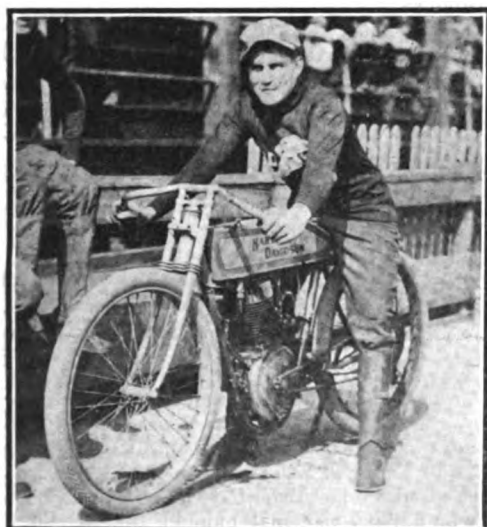
CLUTCH OILING.

TO obviate stopping the machine and removing a grub-screw to oil a disc-type clutch, two screw-down grease cups should be fitted, one on the clutch body at opposite sides. The cups are to contain a light grease and it is only necessary to turn the covers slightly to inject the grease between the plates. Contributed by Eugene Coughlin, New York, N. Y.

NEW PRESIDENT NAMED.

AT the last meeting of the Salt Lake City Motorcycle Club, the resignation of president E. L. Hiteman, who is moving to San Francisco, was accepted and E. L. Claspill was pronounced his successor. It was also decided that the club's permanent headquarters will be at 22 South West Temple street.

ABOUT a dozen members of the Wichita (Kan.) Motorcycle Club recently held a Sunday run to Arkansas City and Winfield.



Harry Immel, Well-known Pittsburgh Racer, Who Will Become an Agent.

AN EVENTFUL TRIP

Constant Bumped a Mail-Box Post with Sidecar, but Made Repairs and Drove Home Safely.

MR. and Mrs. J. U. Constant, of Brooklyn, N. Y., with an Indian 2-speed and Indian sidecar, rode to the Hendee factory in Springfield, Mass., recently and stopped over on their return trip, for several hours as the guest of Mr. and Mrs. Oscar Hedstrom, at Portland. From Portland the Brooklyn speedster and his wife proceeded to their camp at Tylerville, Conn., which they reached at dusk. In the gathering darkness Constant did not see a wayside mail box, which had been placed just opposite the gate through which the camp is approached, and the sidecar struck the post head-on. The impact pulled the front wheel around and bent the forks and frame, but neither the rider or sidecar occupant was injured.

On the following morning Constant straightened the forks of the machine, but was obliged to give it such rough treatment that the fork was cracked at the crown. The start was made from Tylerville at 9 a. m. and between New Haven and Bridgeport the left side of the fork broke. Constant had sufficient confidence in the outfit, however, to proceed without repairs and he brought the sidecar through safely.

THRILLS ON DALLAS BOWL

THINGS are happening down in Dallas these days. Not long ago Richards and Mike Cafarello were coming down off the big bowl that was recently opened there, when Cafarello went down near the running board. Richards, who was still cutting out a terrific pace, struck the fallen racer and both wheels of his machine passed over Cafarello's neck. Officials rushed out, expecting that Mike had received his quietus, but he recovered consciousness inside five minutes and asked for a cigarette and a bottle of soda pop.

A COMBINATION CAP.

ONE of the latest articles of clothing for motorcyclists is a novelty cap with which a pair of goggles is combined. When the goggles are required, they drop down over the eyes comfortably, and when the rider wishes to dispense with them the cap is simply turned around until the goggles are in the back and they are then held up by a neat strap.

HELD RUN IN RAIN

DESPITE a heavy rain, members of the San Jose (Cal.) Motorcycle Club recently participated in a Sunday run to Modesto. For three Sundays in succession rain had interrupted the intended run and the riders finally decided to make it rain or shine.



IMPERIAL OUTING

Brooklyn Squad Enjoys Trip Into Wilds of Staten Island—Annual Smoker December 7.

BROOKLYN, N. Y.—The Imperial M. C. of this city, held its Fall run to Eltingville, Staten Island, on Sunday, November 10. A number of feminine enthusiasts accompanied the boys on their outing and assisted materially in making the program a success. Most of the fair riders occupied tandem seats and several made the run in sidecars. The riders left the clubhouse in a body, and after a leisurely run to Bay Ridge the trip to St. George was made by ferry. From St. George to Eltingville was an easy jaunt. After a duck dinner the club took up the homeward run, and aside from a puncture or two the trip was made without incident.

Those who participated in the outing were J. Behm and Miss F. Smith, Harry Wiggins, William Heide, Charles Miller, J. Fredericks and Miss D. Smith, J. Kraemer and Miss H. Lee, George Eckert, Henry Juenger and wife, William Pflieger and Miss J. Pflieger, J. K.

Meeks and Wife, C. Heide, William Marquiss and J. Bloch.

The Imperial club will hold its annual smoker in Rocco's Cleveland Hall, Brooklyn, on December 7, and arrangements have been about completed for an enjoyable program. William Heide heads a capable committee of arrangements, and the fact that the proceeds are to be devoted to furnishing the new quarters of the club has moved the committeemen to unusual activity. The present staff of the club is made up as follows: F. W. Hammond, president; J. L. Bien, secretary; John Golz, treasurer; Joseph Oswald, vice-president; William Heide, road captain. The committee in charge of plans for the smoker is made up as follows: William Heide, Albert Brown, William Marquiss and Joseph Oswald.

NEW MARYLAND ROAD.

A NEW stretch of road between Laurel and Beltsville, Md., five miles long, has been completed and has cut the distance from Washington to Laurel to about 20 miles. The road is now macadamized as far as Laurel, and it can easily be covered by motorcycle in 40 minutes.

QUESTIONS and ANSWERS

AT least half a dozen interesting letters, submitted in answer to the question: "Which is the most desirable location for the clutch on a belt-driven machine?" could not be considered by the editor of this department, because of the fact that they did not adhere to the query. Several of them went into the control problem and others romped off into equally inviting fields; they may be given publicity later under another head. The consensus of opinion in the letters judged appeared to be that the most desirable clutch location on a belt-driven machine is in the rear wheel.

The first prize went to Harry C. Sundgard, 4535 Mulberry street, Frankford (Philadelphia), Pa., and F. W. Hammil, of 3715 East Seventh street, Kansas City, Mo., was awarded the second prize. Honorable mention is given the answer of N. H. Bedard, of Stockton, Mass. It should be kept in mind that the awards are based simply upon the best letters received and that the editor of this department does not stand responsible for the opinions advanced.

The series of contests now being conducted in this department will close with the issue of December 26, and announcement of the final winners will be made in the next issue, that of January 9. Contributors should submit answers to each question as soon as possible after its first appearance so that the work of judging and awarding prizes may be facilitated. All answers, and communications referring to the contests, should be addressed to: "Editor Questions and Answers, Motorcycle Illustrated, 51 Chambers street, New York."

Below are given question No. 10, that for which answers are now being received, and the new question, No. 11. Prize winners for No. 10 will be announced in the next issue.

Question No. 10. Which is the better method of fitting valves, grinding or trueing?

Question No. 11. Why are the cylinders of a twin motor fitted at an angle?

FRANK

MERRITT

LOCATING THE CLUTCH.

(Question No. 9.)

IN the answers to contest No. 9—"Which is the most desirable location for the clutch on a belt-driven machine?"—that of Harry C. Sundgard, of 4535 Mulberry street, Frankford (Phila.) Pa., has been awarded the first prize, while the second goes to F. W. Hammil, 3715 East 7th street, Kansas City, Mo. Sundgard's answer is as follows:

"There are two positions for the clutch on a belt-driven machine, viz., either in the engine pulley or in the rear wheel, and the final choice depends on the point of view of the manufacturer or the user.

"From the manufacturer's point of view the engine pulley location is the best on account of its lower cost and freedom from complicated parts. The rear wheel location demands the use of a separate wheel to carry the belt rim, the clutch being built into the hub of this extra wheel, which must also run on bearings of its own. All this costs money and it is easy to see why the first position is the one chosen by the greater part of the manufacturers.

"The user's choice hinges on the convenience of the device and its ability to stand up. The engine pulley clutch is naturally restricted to the size of the pulley. There can be very little difference in the size of this clutch, whether it is called upon to transmit four horsepower or seven. Again, the small clutch will give a quicker and, therefore, a more harsh engagement and must be 'urged' to keep

from stalling the engine in starting. On the other hand, the rear wheel clutch may be as large as the wheel itself if necessary and surface can be enlarged to meet the demands of increased horsepower. Also the larger clutch will have an easier engagement and make a much better showing in starting. This point is particularly noticeable on tandem or sidecar mounts. Finally the large clutch will stand up better than the small one, owing to its large surface. It would seem then that the rear wheel clutch should be the user's choice."

Second Prize Winner.

Hammil submitted the following answer:

"In the belt-driven type of motorcycle there are two points at which the clutch can be placed; i. e., on the motor-shaft, or on the rear wheel (as used on the Excelsior and Harley-Davidson, respectively).

"Careful consideration of these two points and their relative advantages indicates to the writer that the rear wheel position is the better, for reasons following: With clutch placed on the motor-shaft, the releasing of the clutch severs the connections between the pulley-shaft and the rim of the pulley, and the belt, small pulley and rear wheel are all stationary. In engaging the clutch the engine has to overcome not only the inertia of the entire machine, but the inertia of the small pulley and the belt. Where the clutch is in the rear wheel, there is only the inertia of the machine to overcome, the engine pulley and belt being already in motion, and the power of the engine is more easily transmitted to the rear wheel. Also, as both pulleys are

always in motion, there can be no slipping and consequently burning of the belt and lagging, as is liable to happen when the small engine pulley engages with the clutch placed in it.

"Another point in favor of the rear wheel clutch is the greatly increased clutch area, allowing of a more gradual engaging of the clutch, and renders a stalled engine unlikely."

Honorable mention is given to N. H. Bedard, of Stockton, Kan., whose contribution follows:

"The most desirable location for a clutch on a belt-driven motorcycle should be a comparatively easy question to answer. It should be decided the same as a rider would decide upon which is the best motorcycle, the best postage stamp or the best ten dollar bill. There are seven or eight strictly first-class motorcycles on the American market and the rider who would venture to say that any one was the best would be stating a fact so far as his own personal opinion was concerned, but it would not be a fact in the opinion of a very large percentage of the riders.

"Likewise, there are two excellent locations for the free engine clutch, one is on the engine shaft and the other in the rear wheel. Both are giving perfect service and each has its advantages over the other. It would be unfair to make a general statement that one was more desirable than the other, because that would be a personal opinion, and would be contrary to the ideas of thousands of good, sound thinking riders. Both of these locations are good; in fact, they are ideal. and it

is purely a matter of choice of the individual rider to determine which is the more desirable in his case.

"If this question should include the two-speed in connection with the clutch it would then be a very one-sided question and an easy one to answer in favor of the rear wheel location. It is to be regretted that the American manufacturers have given so little attention to the development of the practicable two-speed and the improvement of the present belt transmissions, both of which admit great possibilities."

STORAGE BATTERIES.

H. DE LANDER.—Storage batteries suitable for your purpose are made by the Pennsylvania Storage Battery Co., 221 North 23d street, Philadelphia, Pa., and the Willard Storage Battery Co., Marquette road, Cleveland, Ohio. For information on electric lighting, we refer you to an article by Wm. Hetherington, Jr., page 44, issue of October 3.

F. N. MOTORCYCLES.

V. DEMIANOFF.—The F. N. motorcycles are made by the Fabrique Nationale d'Armes de Guerre, Herstal-lez-Liège, Belgium. The American F. N. Company, of Newtonville Station, Boston, Mass., are the American agents.

PORTLAND'S POOR STREETS.

MOTORCYCLISTS living in the suburbs of Portland, Ore., have some bad roads to contend with as is proved by the accompanying picture of Chesley Soules, a messenger who uses a Thor 4 for business purposes. Soules rides his machine all the year round, and averages from 50 to 90 miles a day. He has ridden seven machines, all different makes, since taking to the motorcycle and is now convinced that the Thor will meet his requirements. Ten other passengers in



the employ of the City Messenger and Delivery Company, connected with the Postal Telegraph Company, also ride Thor machines.

SIDECAR QUERIES.

EARLE P. Chamberlain.—(1) We doubt whether it would pay you to use the single machine with clutch only for sidecar work in the section in which you purpose driving it. It would carry you and passenger up ordinary grades with a little clutch manipulation or none at all, unless sand was encountered, but on steep hills the passenger would probably have to walk. (2) If not properly attached the strain on the motorcycle will be great, and breakage may result; line up the sidecar as given in the "Tips and Topics" section, etc., in these columns recently. Most frames are not built for sidecar attachment, but stand up finely, showing the high grade of material and good design in them. (3) It varies from 30 to 36 inches. (4) If properly attached, a side-car outfit can be easily controlled on muddy or rutty roads, after the trick has been learned. There is often less tendency to side-slip than with the machine alone. (5) A noticeable difference, but not one that is serious. When there is no load, steering is more difficult, but a little practice will enable the rider to unconsciously drive allowing for the difference in behavior between the loaded and empty car. (6) Use a 5¼ or 5½ to 1 gear rather than a 6 to 1. The latter may cause the motor to overheat.

KEWANEE TO HELENA, ARK.

W. M. HOFFMAN.—From Kewanee go to Galesburg via Galva and Wataga, 37.7 miles; good roads, with a little gravel. From Galesburg go next to Peoria, via Knoxville, Gilson, Maquon, Middle Grove and Framington, 53.6 miles; fair country roads. From Peoria go on through Mackinaw, Lilly, Danvers, Bloomington, Gillum, Farmer City, Mansfield, Mahomet to Champaign, 98 miles over country roads. From Champaign go to Indianapolis via route 206 (Spring Touring Number) reversed, 137.7 miles. From Indianapolis take route 211 to Louisville, Ky., 125 miles. From Louisville take route 140 to Mammoth Cave, then route 313 reversed to Nashville, Tenn.

From Nashville go to Sheffield, Ala., via route 314, distance 119.7 miles and rough and heavy roads. From Sheffield, Ala., take route 311 reversed to Memphis, Tenn. The distance is 161.7 miles and the roads rough. All through this section rough and poor roads are encountered. From Memphis go to Lynchburg, Miss., then to Walls Station, Glover, Lake Cormorant, Clacks, Robinsonville, Hollywood, Tunica, Trotters Landing, and there take ferry to Helena, Ark. The distance is 62.6 miles and the roads very indifferent.

THREE-SPEED GEARS.

CENTRAL AUTO SUPPLY CO.—The three-speed gear mentioned in our issue of October 31 is the Armstrong, made by the Armstrong Three-Speed Gear Works, Icknield street, Birmingham, England. It is not as yet made for larger motors than four horsepower.

ADDRESSES WANTED.

THE Questions and Answers Editor desires the addresses of R. C. Newman, of Chicago, Ill.; also that of "E. L. B., Blank, Pa." It is requested that contributors use their home or business address on all letters sent to this and other departments. Many of those who contribute neglect this.

AN ALTOONA BOOSTER.

W. UNGER, the subject of the accompanying photograph, is employed by the Altoona (Pa.) Water Department and on many



occasions he is called upon to make emergency trips to outlying points. Under these conditions a rapid and economical means of "getting on the job" was necessary and Unger solves the problem by using a 6 h. Flying Merkel machine. Some of Unger's hurry trips are made at night, but he has never been obliged to leave his motorcycle behind, and it follows naturally that he is a booster of the first grade.

LEVEL TOO HIGH.

G. R. EWALT.—The level of the gasoline in the float chamber is too high, we think, and you would do well to change it. Bend down the float lever to change the level, so that the float will not stand so high when the float valve seats. It may possibly be that the valve needs regrinding also. Try new adjustments immediately after making the change of level and clean out the gasoline passage to the float chamber. See the Motorcycle Manual.

B. & C. TWO-SPEED.

S. J. N.—Write Bushnell & Cannon, 1268 East 80th street, Cleveland, Ohio, for information on the B. & C. two-speed gear.

WELLS IS DELEGATE.

W. H. WELLS, manager of the London (Eng.) branch of The Hendee Manufacturing Co., has been appointed a delegate to represent the Federation of American Motorcyclists at the conference scheduled during the week of the Olympia motorcycle show, to consider the advisability of reviving the defunct International Motorcycle Federation. Mr. Wells attended the F. A. M. convention at Columbus, O., last summer as the ambassador of the Auto-Cycle Union, of Great Britain, the national motorcycle governing body of that country.

MR. AND MRS. C. C. BARNHART, of Colorado Springs, recently completed a motorcycle trip from their home to Erie, Kan.

AMONG THE CLUBS

MOTORCYCLE COURIERS

Members of Brooklyn Club Assisted Mercury A. C. by Collecting Bulletins on Marathon Runners.

BROOKLYN, N. Y.—Motorcycle couriers were used in connection with the annual road race of the Mercury Athletic Club, of Yonkers, on Thanksgiving Day. The course is laid out so that the runners travel 16 miles through the countryside and the remainder of the race is run on the Empire City track. In order to keep in touch with the contestants so that their positions might be announced from time to time at the track, the club called the motorcyclists into action and solved the problem satisfactorily. In addition to acting as couriers the motorcyclists were supplied with first-aid appliances so that they could assist runners who collapsed or were otherwise in need of help.

The band of motorcycle messengers was in charge of William Hetherington, Jr., and Clarence D. Morgan, of the Linden M. C., of Brooklyn. At the close of the race the motorcyclists were the guests of the Mercury club committee at a dinner.

WASHINGTON NOTES.

WASHINGTON, D. C.—The National Capital Motorcycle Club is out after high honors. It aspires to lead the inaugural parade when Woodrow Wilson assumes the office of President on March 4. Steps have already been taken to interest influential local

men in the plan, as well as the police authorities. H. B. Cohen, treasurer of the club, will go to New York City in a short time to call on the officers of the National Democratic Committee, especially Chairman McCombs, and lay the plan before them.

THE National Capital Motorcycle Club, through a committee named for the purpose, had a meeting a few days ago with the Board of Examiners for the municipality of Washington, to take up the question of permitting motorcycles with passenger carriers attached to operate in the city. A sample machine, fitted with the additional seat, was submitted for inspection. It was argued by the committee that this machine was absolutely safe and that no real objection to its use could be made. At present a machine with a carrier attachment is not permitted. The Board of Examiners promised to consider the matter carefully.

ANNUAL FEAST.

BALTIMORE, Md.—The Maryland M. C. riders mounted their machines on Sunday, November 17, and went down to a nearby shore where their annual oyster roast was served.

Nelson Johnson has so increased his lead in the race for the diamond medal for attendance at club runs that he is practically assured of winning it.

MORE than thirty motorcyclists of South Bend, Elkhart and LaPorte, Ind., participated in a run to Gary recently, where a turkey dinner was served.

INVINCIBLE OFFICERS

Prominent Brooklyn Squad Names New Staff and Lays Plans for 1913—Series of Winter Programs.

AT the last meeting of the Invincible M. C., of Brooklyn, N. Y., the following officers were elected: M. M. Aiken, president; L. N. Vine, vice-president; W. H. Washburn, secretary; D. R. Thompson, treasurer; J. C. Fawcett, captain; O. P. Warlick, F. H. Chase, Robert Graves, James French and H. E. Stout, members of the Board of Governors.

Plans for the 1913 season were discussed and the club announced its intention to participate even more actively in runs and competitive events during 1913 than it has for 1912, despite the fact that the last summer was a busy one for the squad. Prizes are to be offered for regular attendance at club runs during 1913, and there will be numerous other features to keep the boys keyed up to a high pitch of enthusiasm. A series of winter entertainments is now about to be started.

MARYLAND CLUB PROTESTS.

BALTIMORE, Md.—The Maryland M. C. has taken cognizance of the growing fad of roller skating in this city. At its last meeting the members sent a letter to the Police Board calling attention to the fact that such great numbers of children throng the main thoroughfares during the afternoon and evening that it is dangerous for the motorcyclists to venture forth on a spin. The suggestion is made that some side streets be set aside for roller skating.

NEW JERSEY RUN.

A. AND P. BOSHEN, S. Eberhardt, L. Benedict, G. Riechey, Fred Cordes, W. Allen, Howard Hill, C. McMyrtle and B. Mathewson, of the New Jersey M. C., participated in a Sunday run to Whitehouse, N. J., on November 17. A chicken dinner was enjoyed and it was unanimously agreed to hold a similar run New Year's Day.

PENSACOLA ACTIVITY.

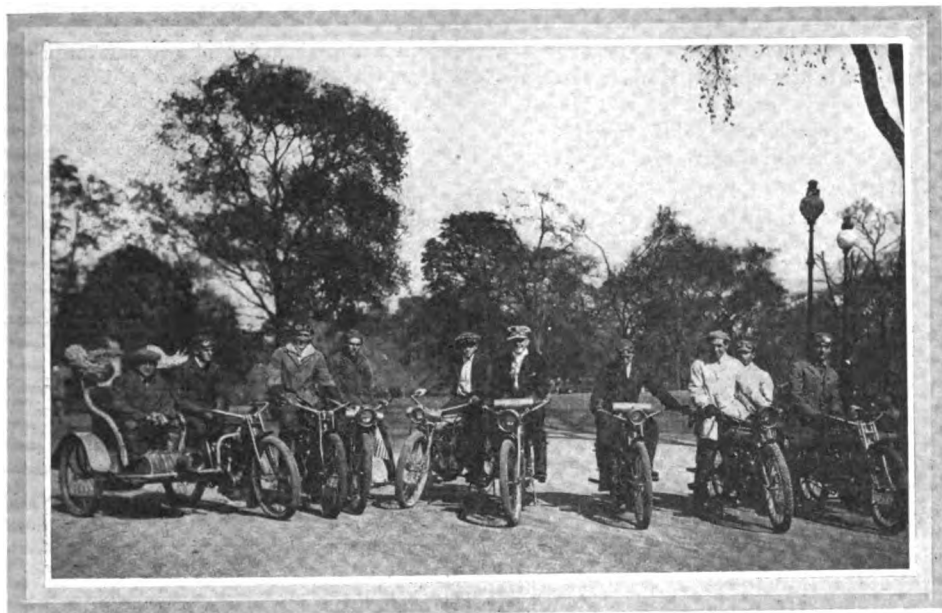
WORD comes from the Pensacola (Fla.) Motorcycle Club, which was recently organized with 25 members, that the outlook in that city is very promising. E. C. Hinman, Indian agent, has contracted for fifty 1913 models and already has buyers for ten. Practically every machine on the market is represented in this field.

A NORFOLK OUTING.

TWENTY members of the Twin City Motorcycle Club, of Norfolk, Va., recently participated in a sociability run to Elizabeth City, N. C.



A Representative Turn-Out of Members of the Colonial Touring Club, of New York, at Grant's Tomb, Watching the Recent Battleship Review.



Colonial Touring Club Riders Escorting Sidecar Crew on a Recent Outing.

FROM THE F. A. M. FORGE.

L. W. LUDDEN, of 11 North Main street, Brockton, was recently appointed State F. A. M. Commissioner for Massachusetts. Local F. A. M. commissioner appointments in Ohio have been made as follows: R. S. McConnell, 3 Wick Building, Cleveland, for Cuyahoga County; William J. O'Shea, 145 Michigan street, Toledo, for Lucas County; Walter Robb, c/o George W. Mills, Canal Dover, for Tuscarawas County, and E. A. Falknor, of Kessler's Station, for West Milton and vicinity. Allen B. Lewis, of Kittery Depot, Me., is also a local appointee.

The repair shop of Clark Sturtz, 33 South Fifth street, Zanesville, Ohio, recently received the sign of the F. A. M.

A "GET-TOGETHER" SESSION.

A GET-TOGETHER session precedent to the formal organization of the Riverside Motorcycle Club of Greater New York will be held in the club rooms at the Riverside Motorcycle garage, 533 W. 110th street, New York City, Saturday evening, December 28th. A dinner, with accessories, will be served, and an otherwise interesting program is being arranged. Every motorcycle dealer and rider in Greater New York is invited to attend, and it is hoped to make this gathering one of the largest of its kind ever held in this city.

SOUTHERN APPOINTMENTS.

T. E. SPOTTSWOOD, JR., of 461 Dauphin street, Mobile, Ala., has been appointed local F. A. M. commissioner for Mobile County, and T. L. Chase, of Hurley, N. M., has been appointed local commissioner for his district.

SOCIAL meetings to be held every other Wednesday evening in the quarters of the National Capital M. C., of Washington, have been started and are proving very successful. Refreshments are served and there is usually a smoker. The National Capital Club now has a membership of about 100.

A WEEK'S REGISTRATIONS.

THE following repair shops were registered with the F. A. M. during the week ending November 16: Gartin Cycle & Auto Com-

pany (B. A. Gartin), Third and Ruby streets, Ellensburg, Wash.; The Best Motor & Cycle Company (John Hohl), 37 West Jefferson street, Phoenix, Ariz.; Walthour Motorcycle Company, Inc. (R. E. Walthour), 1714 Third avenue, Birmingham, Ala.; and the Motorcycle Equipment & Repair Company, conducted by S. M. Saunders, C. D. Bohannon and Richard Dymond, at 727 Common street, New Orleans, La.

CLUB'S RAPID GROWTH.

PRESIDENT SHANNON, of the Atlantic City (N. J.) Motorcycle club, reports a gain in membership of fifty per cent. during the last year. Members of the club will participate in a run to Weymouth, N. J., on December 1.

ARROW CLUB OFFICERS.

AT the first annual meeting of the Arrow Motorcycle Club, of Jersey City, N. J., the following officers were elected: Leo Herzig, president; Ernest Meier, vice-president; George Strohsahl, secretary and treasurer; Paul Klaar, sergeant-at-arms, and Edward Bissinger, road-captain.

ECONOMY WITH THE TANDEM.

R. L. MILLER, of West Lafayette, Ind., states that a short time ago, he covered eighty-four miles on one gallon of gasoline, with a passenger on the tandem seat of his Yale twin. At another time, Miller states, the two made a trip of fifty-five miles over roads that were muddy, and only five pints of gasoline were used.

A RECENT hill-climbing contest held by the Springfield (Ohio) Motorcycle Club drew a large crowd and proved unusually interesting.

ROY SULLIVAN, of Charleston, S. C., won the motorcycle race held in connection with the Orangeburg (S. C.) Fair.

F. G. KEEGAN, of Globe, Ariz., in order to win a wager, is riding his motorcycle from his home to Reno, Nev.

A NUMBER of motorcyclists of Altoona, Pa., recently participated in a Sunday run to Roaring Spring.

PRINCE'S ENDORSEMENT

President Patterson Forwards Letter Telling Veteran Track Builder He Has O. K. of Federation.

IN keeping with the action of the F. A. M. Board of Directors at the recent special meeting in St. Louis, President Patterson has forwarded a letter to Jack Prince, the veteran track builder, informing him officially of the endorsement given him by the directorate. Prince had reason to believe that stories were being circulated in some quarters to the effect that he was in bad odor with the F. A. M., and he appeared at the St. Louis meeting to request that the F. A. M. officials make some sort of an announcement of his satisfactory standing in the national body. The board of directors assured him of their belief in his personal integrity and wished him luck. Later President Patterson sent him a copy of the following letter:

"It gives me great pleasure to advise you that at the meeting of the Board of Directors, held at St. Louis, on the ninth day of November, nineteen hundred and twelve, at this hotel, it was the unanimous sentiment of the Board of Directors that you are a reliable and competent builder of motorcycle tracks. You are a member of the F. A. M. in good standing and have been affiliated with us for many years. During all this time your dealings have been satisfactory, and you are entitled to our endorsement and best wishes. Nor is there any objection to your aiding in opening such tracks and giving the promoters the benefit of your long experience.

"This letter is written in accordance with the unanimous expression of the Board, and you are at liberty to make it public."

HILL-CLIMBING CONTEST.

A large crowd witnessed the recent hill-climbing contest under the auspices of the Springfield (Mass.) Motorcycle Club at the Snyder Hill, west of the city. There were 16 starters, all members of the local club, and 14 of them finished. Each of the riders covered a distance of about six-tenths of a mile from a standing start.

The following is the result of the climb: Wilkins, "5-35" Harley-Davidson, time 1:02; Grisso, 7 h. Harley-Davidson, time, 1:04; Horner, 5 h. Emblem, time, 1:05; Rhoades, 5 h. Indian, time, 1:07; Pence, 7 h. Excelsior, time, 1:09; Lubbers, 5 h. Indian, time, 1:10; Clark, 7 h. Indian, time, 1:10; Zeigler, 4 h. Harley-Davidson, time, 1:13; Scofield, 7 h. Indian, time, 1:14; Strong, 5 h. Emblem, time, 1:20; Hicks, 4 h. Indian, time, 1:22; Vull, 4 h. Emblem, time, 1:38; Dase, 4 h. Thor, time, 1:40; Hadley, 4 h. M. M., time, 2:03.

ROAD RACE WINNERS

LEO POWERS, riding a 4 h. single Excelsior, won the annual road race of the Des Moines M. C., and Phil Streit, riding a 7 h. twin Excelsior, took second honors.

CAMPLEJOHN THE VICTOR.

BERT CAMPLEJOHN was the winner of the recent road race of the Jacksonville (Fla.) Motorcycle Club, to Fernandina. This was the first event of its kind held by the southern club.

AT the last meeting of the Reading (Pa.) M. C. it was announced that the club's annual banquet will be held on December 6.

M & M ECONOMIZER.

ONE of the newest products to interest the thoughtful motorcyclist is the M & M Economizer, a device manufactured by the Moller Brothers Controller & Economizer Company, 700 Betz Building, Philadelphia, Pa. The Economizer is a fitting with one ground valve seat and six portholes, and is intended to admit auxiliary air above the carbureter, thus permitting of maximum efficiency from the fuel and more flexible running of the motor. The amount of air to be admitted is controlled by hand, and the gas coming from the carbureter is broken up and sprayed by the incoming air so that when it reaches the cylinder it is vaporized to the highest possible degree. In other words, the M & M Economizer is an adjunct to the carbureter, completing the work of that instrument.

The makers guarantee that the Economizer will increase the speed and pulling power of a motor 20 per cent; that it will mean a saving of 40 to 50 per cent. in gasoline and that it will greatly reduce carbonization trouble. The device acts as a safety valve in case of a back-fire, and it may also be used for priming purposes. The basis of the claim that carbon will not collect readily is apparent because of the fact that with the Economizer in service the motor is always running on the thinnest mixture that will deliver the power. The M & M device is attached by the aid of a 1/4-inch standard pipe tap, and is extremely simple both in fitting and operation.

MERZ SELLS THE YALE.

INDIANAPOLIS, Ind., Nov. 22.—A new agency in the ranks at Indianapolis is the Yale. John E. Merz, the live wire who is a leader in the new Indianapolis Motorcycle Club, has acquired the Yale agency for this city for the coming season and is confident that the "Big Y" will be strongly represented among Indianapolis riders in the future.

FARMERS WANT THEM**Demand for Motorcycle in Kansas Is Growing Rapidly and Most of the New Machines Are Going Into Rural Districts.**

THREE contracts, taken by T. A. Miller, of the sales department of the Harley-Davidson Motor Company, and signed by the Drouhard Brothers, of Kansas, call for the delivery of 310 machines, practically all of which will be sold to farmers. The Drouhard firm in Danville, Kan., a small town with a population of only 200, has contracted for 150 machines. The territory of this particular company is limited to five rural counties. One hundred machines will go to the Drouhard Motor Company, at Wichita, and 60 to Gene Drouhard, of Pratt.

Sanders Brothers, of 915 Race street, Cincinnati, and George Schroeder, of Davenport, Ia., will continue to handle Harley-Davidson products in their respective districts. The Alliance Motor Company, of Alliance, Ohio, has been given Stark County as territory. Louis E. Fluke, proprietor of the Harley-Davidson Sales Company, of Dayton, Bauman & Hines, of Richmond, Va., Frank J. Overstreet, of Kiowa, Kan., E. R. Allen, of Cherokee, Okla., and L. R. Heitz, of Muscatine, Ia., are also on the list of dealers figuring in recent contracts.

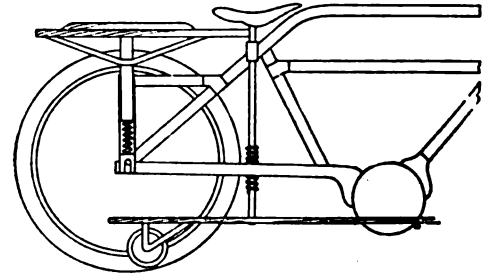
FORSTER NOW WITH MIAMI.

CAMERON FORSTER, who has had considerable experience on the road, has joined the staff of the Miami Cycle & Mfg. Co., Middletown, Ohio. He will be assistant sales manager of the Racycle and Hudson departments.

HOWARD A. FRENCH & CO., Indian agents in and around Washington, have ordered 100 Indians for 1913, of which fifteen have already been sold.

SPRING FOOTBOARDS.

NOVEL footboards and a somewhat original springing system, feature the machine shown in the diagram. It is the invention of an Englishman, who argues that the small side wheels would be welcomed by inexperienced riders, by women and elderly enthusiasts, as they could be pushed down to give additional bearings on the ground in an emergency, such as a side-slip. The drawing appeared in a recent issue of *Popular Mechanics*.

**QUEEN CITY PATENTS.**

THE Queen City Iron & Wire Works Company, of Denver, Col., which has been making luggage-carriers and tandem attachments for motorcycles in a small way for the last four years, has now perfected and placed on the market two rear seats which provide both luggage and tandem accommodations. Four applications for patents have been made and two have already been allowed. The company is convinced that it has a rapid seller, and is preparing to supply a wide demand. Seat No. 1 embraces many desirable features, such as enclosed coil springs, both up and down and forward and back, so that every precaution is taken to guard against the transmitting of road shocks. The seat also has an adjustable back-rest, which can be raised and lowered while the machine is in motion. It has folding foot-rests which are adjustable to suit the user.

Seat No. 2 is to be marketed at a lower price. It also has enclosed coil springs, which allow it about six inches of shock-absorbing action, and is on the whole a very comfortable seat. It also makes a first-class convertible luggage-carrier, and is produced to fit any standard motorcycle.

NEW MERKEL BOOMERS.

IN a recent bulletin from the Miami Cycle & Mfg. Company, the following new agencies are reported as having been closed during one week: The Edwards Cycle Company, for Minnesota; The Dominion Cycle Company, for Manitoba, Canada, and the Western Cycle & Motor Company, for Saskatchewan, Canada. The company will be represented in Nebraska and the western counties of Iowa, by the Nebraska Cycle Company. Norman E. Heil was also on the list, for Paterson, N. J. In New York State the Utica Cycle Company, of Utica; W. J. Caldwell, of Newburgh; The W. A. Doubleday Company, of Syracuse, and Neff & Malone, of Rochester, will handle Merkel machines in their respective cities.

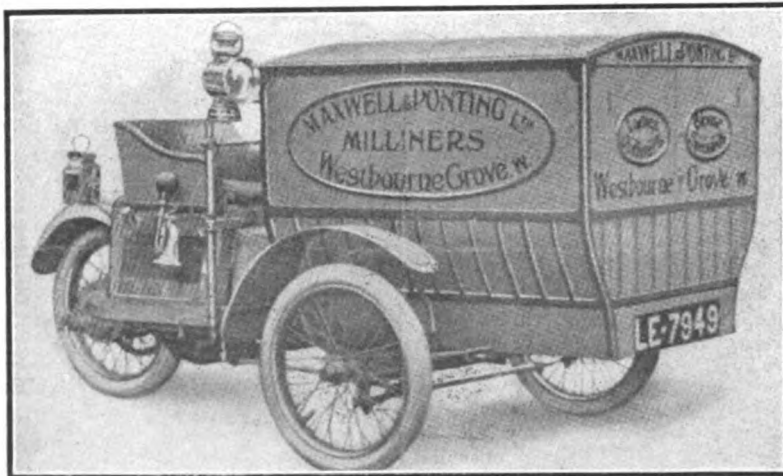
AN OKLAHOMA AGENCY.

ANNOUNCEMENT is made by the Pope Motor & Cycle Company, of Oklahoma City, Okla., that new quarters have been opened where it will handle a full line of supplies together with the Pope line for 1913.

STURDY ENGLISH VAN.

FROM William L. White, 1129 Comox street, Vancouver, B. C., comes the interesting photograph reproduced herewith. It shows a striking view of the Omnium Motor Carrier, for which Mr. White is agent in western Canada. The agent states that the Omnium outfit has given excellent service and that there is

a rapidly growing demand for it, although it has been on the market only about a year. The Vancouver enthusiast was moved to send in the photograph by a perusal of D. R. Hobart's serial article on "The Successful Delivery Van," the final instalment of which appears in the last issue. The price of the standard Omnium is \$515, f. o. b. London, Eng.



JEFFERY-DEWITT EXTENSION.

THE Jeffery-Dewitt Company, of Detroit, manufacturers of the Reliance brand of spark plugs and the new J-D Visible plug, has been forced by increasing business to occupy new quarters in addition to its large original factory. Accordingly, a new site on the East Grand Boulevard, the greatest motor way of Detroit, has been chosen, and the entire assembling and shipping will be carried on, hereafter, at this plant, known as No. 2. The new building allows 6,000 additional feet of floor space.

MERKEL AGENCIES.

AS evidence that the 1913 Flying Merkel "looks good" to the dealer, the Miami folks point with proverbial pride to the manner in which they are lining up new agencies. Last week's harvest included the following: Norwich, Conn., Stebbins & Geynet; Hartford, Conn., W. T. Hayes; Chicago, Ill., Fred Huyck; Kewanee, Ill., Gilfillan Bros.; Evansville, Ind., Koch Outfitting Co.; Iowa City, Iowa, Paul W. Smith; Kiowa, Kansas, Benton & Ives; Wakefield, Kansas, H. A. Avery; Springfield, Mass., F. N. Coleman; Paterson, N. J., H. E. Heil; Naponach, N. Y., H. W. Justus; Hamburg, N. Y., John Seaten; Newburgh, N. Y.; W. J. Callwell; Syracuse, N. Y., W. A. Doubleday; Utica, N. Y., The Utica Cycle Co.; Brooklyn, N. Y., John Pflieger; Sidney, Ohio, Knupp Bros. Garage, Erie, Pa.

SPEAR'S EVENTFUL TRIP.

WILLIAM R. SPEAR, traveling representative of the R-S, has just returned from a very successful trip through New York State. Starting in October he visited practically every city and town in the State, and ran over all kinds of roads, not the least interesting of which were met with between Auburn and Seneca Falls, and near Watkins Glen. Over 1,600 miles were covered, with only two punctures, due to broken bottles. The following agents among others for the R-S product have been appointed: Saratoga Springs, C. J. Church & Son; Binghamton, W. A. Merrill; Cortland, Daymor & Mead; Hornell, C. E. Burdett; Salamanca, Niles Razor Works; Utica, Otto L. Endres; Rome, Fred Strowbridge; Ilion, Robert Thompson

UNCLE SAM WANTS BIDS**Postal Authorities Will Receive Rental Propositions Covering Twenty-five Motorcycles for Regular Service.**

WASHINGTON, D. C.—The recent motorcycle tests made by Postmaster Merritt, under the direction of Dr. C. P. Grandfield, first assistant postmaster-general, in connection with the city mail delivery and collection service, proved so satisfactory that Dr. Grandfield has ordered sealed proposals to be received until 2 p. m., December 12, 1912, for the rental of "25 motor vehicles, with three wheels, to be used by letter carriers in the delivery and collection of mail during the period from February 1, 1913, to June 30, 1916."

In discussing the recent tests Dr. Grandfield said that he had satisfied himself that there is a very wide field to be filled by motorcycles in the postal service, and that he is anxious to give them a thorough test. The plan of renting twenty-five vehicles, equipped according to special specifications furnished, was decided upon. It is possible that during the contract term the number of vehicles to be rented may be materially increased. A number of cities throughout the country will be designated in which the motorcycles will be used, not less than five being sent to any one city. This would indicate that the machines will be tried out in five cities at first.

Two new styles of letter boxes have been adopted by the department for use in connection with the collection of mail by motorcycles. Both open in front, instead of at the end. From one of them the mail is swept into the receptacle on the vehicle with the hand; in other words, scooped up and out. In the other the mail is dumped out into the motorcycle van by the tilting of the street receptacle. The specifications, among other things, require that contractors shall provide for instructing the carriers in the operation of the vehicles, and that contractors shall pay all expenses of operation, maintenance and repair, including licenses, fees or other charges required by laws and ordinances.

A blank form of proposal will be furnished on application to prospective bidders. The machines must be equipped with a suitable weatherproof box, of sufficient capacity to

hold 400 pounds of mail, with a door on each side into which the mail may be dumped from drop-bottom street letter boxes without the carriers dismounting from the vehicles.

TOLEDO FIRM INCORPORATES.

THE Toledo Sporting Goods Co., 1006 Monroe avenue, Toledo, O., considerably enlarged its scope recently when it became a corporation with \$10,000 capital. A. D. Rivers, who has always been the leading spirit in the concern, is president, and Charles R. Miller, for many years superintendent of the Miami Cycle & Mfg. Co., at Middletown, O., is secretary and treasurer. The company will sell Flying Merkel motorcycles in Toledo and northwestern Ohio.

AGENT FOR THREE STATES.

AN announcement of considerable importance was made this week, to the effect that Hans Johnson, of Dallas, Texas, has arranged to sell Flying Merkel motorcycles in Texas, Louisiana and Oklahoma. Johnson already handles the Miami line of bicycles in this territory, but heretofore he has not stocked motorcycles.

A HENDEE WARNING

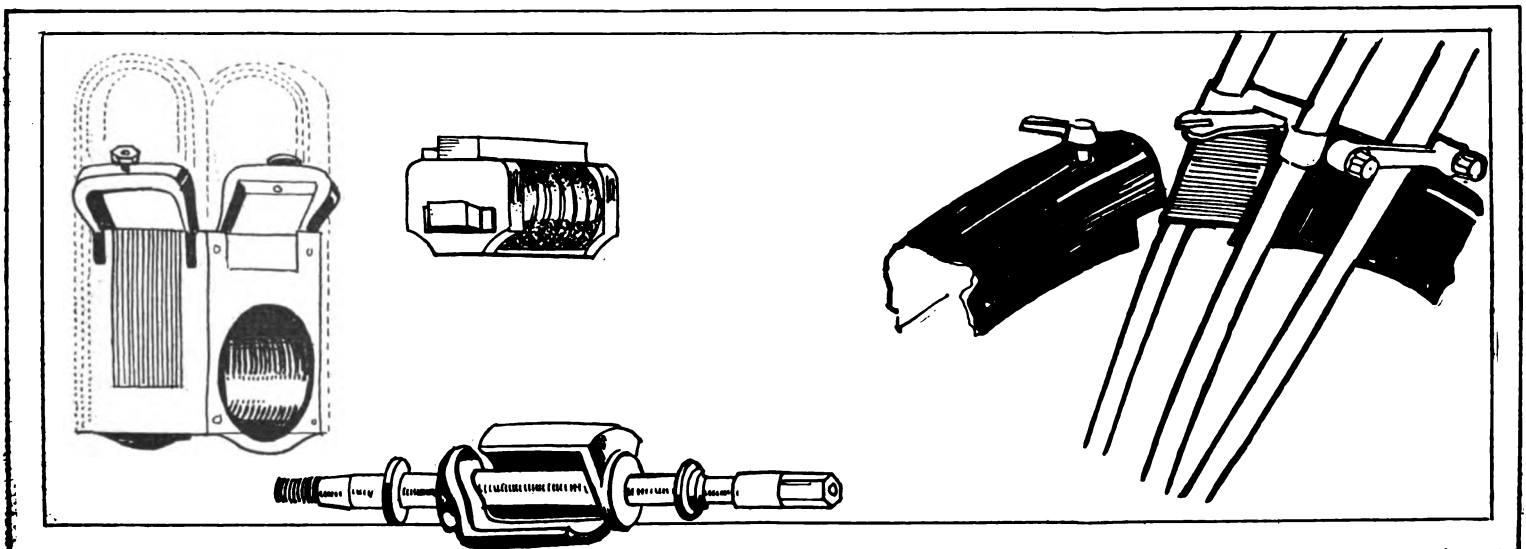
OWING to the fact that some designers have shown a tendency to follow the lines of the Indian cradle spring fork too closely, the Hendee Manufacturing Company, through its patent attorneys, has given notice that patents are pending on the cradle spring fork construction and that infringers will be prosecuted vigorously.

HAZLETON HANDLES YALE.

E. P. HAZLETON has taken the 1913 agency in Washington for the Yale. He has long been in the bicycle business here and has sold motorcycles as a side issue, but he expects to give much attention to the latter machine from now on.

IN NEW QUARTERS.

THE Bidwell-Conklin Company, formerly located at 2142 Broadway, New York City, has moved to new and more spacious quarters at 277 Lenox avenue.



At the Left is Shown the Nilmelior Alterno Magneto, Specially Designed for 90-Degree Twin Motors, and Used on English Cyclecars; at the Right, the Detachable Front Mudguard on the New English Hudson.

NEWARK TRACK SOLD FOR \$9,500

NEWARK, N. J., November 25.—When the Vailsburg board track was offered at public auction this afternoon to satisfy a claim of the contractors who built it William Girth, of Vailsburg, became the owner, his bid being \$9,500. The track was erected by Zacker & Kurhl, Newark contractors, and their claim amounted to \$10,695.20.

Otto Zacker, of the contracting firm, opened the bidding with an offer of \$5,000; Mr. Cross, one of the owners of the motordrome, made

a bid of \$6,000 and Girth increased it to \$9,500. The purchase price covers the six racing machines used on the track last summer, as well as other incidental fittings.

There is much speculation as to what the new owner intends to do with the track, and it is strongly hinted that arrangements will be made to hold motorcycle races next year with certain restrictions, to be approved by the authorities. Paul Derkum, erstwhile manager of the track, is in Los Angeles.

YALE BOOSTERS MEET.

AT a meeting of the sales force of the Consolidated Manufacturing Company, held Friday, November 22, the present national advertising campaign of the company came in for attention, and the reports submitted relative to results already achieved were highly encouraging. The object was to ascertain the practical effects of the campaign and to lay plans for its continuance, in even a broader sense. Those present at the meeting were: D. J. Welsh, general manager; Robert Hinds, sales manager; Eastern Sales Manager F. C. Cornish; Baird, Capron and Squier of the "Flying Squad"; James A. Campbell, of the traveling force, and L. F. McManus, advertising counsel. The Flying Squad riders, who have been in close contact with the agents, were enthusiastic over the outlook.

ON EUROPEAN TRIP.

CHARLES GUSTAFSON, SR., chief of the experimental department of The Hendee Manufacturing Co., sailed from New York for Europe on the American liner *St. Paul*, Saturday, November 16. He will visit the Olympia motorcycle show which opened in London November 25, and during his stay in Great Britain he will be the guest of W. H. Wells, manager of the Indian London branch. Later Mr. Gustafson will renew acquaintance with his birthplace in Sweden, which he has not visited in 18 years. He will return to America in ample season for the New York motorcycle show.

SATISFACTORY SERVICE

AMONG the motor fitments to give a good account of themselves in the recent Angel City Motorcycle Club endurance run, from Los Angeles, Cal., over a 1,124-mile course, were Hagstrom spark plugs, which are reported by Clarence Biggs, James Leonette, S. T. Clark and N. H. Redfield as having given them highly satisfactory service.

READING-STANDARD AGENT

F. H. VAN DUSEN, of Port Richmond, Staten Island, N. Y., recently contracted for the agency for the Reading-Standard in this locality.

CHICAGO M. C. PLANS ROAD CLASSIC

MOVEMENT for a national road race for motorcycles, similar to the Elgin national road race for automobiles, has been taken up by the Chicago Motorcycle Club and expressions of sentiment are being obtained from manufacturers and well-known riders, with a view to ascertaining how the event would be received. It is the belief of the club officials that such an event would awaken

new enthusiasm in the motorcycle field throughout the States. The Chicago Club desires to hold the program on July 4, 1913, and to run three events, one of 175 miles for 4 h. machines, one of 200 miles for 5 h. machines, and one of 250 miles for 7 h. machines. The idea is that these races would be run at the same time, the starts being made at half-minute intervals.

THE ATLAS GROWTH.

SO rapid has been the growth of 1913 business that the Atlas Specialty Manufacturing Company, of Chicago, has found it necessary to increase its floor space by 35,000 square feet. The company has also installed considerable new machinery, and is now prepared to meet all demands for its products. Orders for 1913 have set a new mark during the last three weeks.

FLYING MERKEL AGENTS.

A NUMBER of important changes and additions in its rapidly growing list of 1913 Flying Merkel agents were announced by the Miami Cycle & Mfg. Co., of Middletown, Ohio, this week. Harwood & Minton is the name of a new firm just formed in Nashville, Tenn., that will go after business on a large scale, and handle Flying Merkel motorcycles and bicycles and other Miami products. Thurman Constable, well known in the middle west as a successful dirt track rider, will sell the Flying Merkel in Union City and vicinity, and will also ride the "Yellow Pup" at dirt track meets.

The Nebraska Cycle Co., a large and prosperous concern of Omaha, Neb., will distribute Flying Merkel motorcycles and other Miami products in the State of Nebraska and in adjoining Iowa counties. Another newcomer is M. T. Gerrity, who will open a store and repair shop at Elmira, N. Y. He will handle Flying Merkel motorcycles and bicycles exclusively, and has already specified delivery for half a carload of machines.



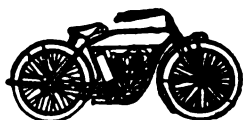
MORE YALE CONTRACTS.

CONTRACTS have continued to flow into the Yale headquarters during the last week. A few of the last to be filed are from L. E. Phillips, Byhalia, O.; Osgood & Drackley, Boone, Ia.; R. W. Bechtel, Plain City, O.; L. M. Robertson, Ames, Ia.; the Syracuse Motor Co., Syracuse, N. Y. Another contract that carried with it an order for a large number of machines was that of the Buettner-Helm Company, East St. Louis, Ill.

TOURIST TROPHY WINNER

"WE have with us today" the first reproduction published in America of the winner of the English Tourist Trophy race, the English classic. The gentleman with the cigarette is M. F. A. Applebee, who piloted the Scott two-cycle to victory last July. Mr. Applebee ascribes his victory to a large extent to the perfect transmission service afforded by his Renold chains. His average time in covering the mountainous course of 187 miles was 48.69 miles per hour. The winners of the Junior T. T. and the Scottish trials were also equipped with Renold chains, for which Peter A. Frasse & Co., of 417 Canal street, New York, are the United States distributors.

SIEMENS BROTHERS & CO., LTD., the English manufacturers, have brought out a rather ingenious electric lamp for illuminating a route card or map in night riding. The case in which the dry cell for supplying the current is carried is fastened around the rider's waist.



THIS IS THE TIME TO BUY

Motorcycles and Automobiles

AT 1/4 to 1/3 THE PRICE WHEN NEW

We specialize in selling standard makes of motorcycles and automobiles in slightly used condition.

Large assortment of used motorcycles, single, two and four cylinders; chain, belt or shaft driven—Indian, Pierce, R-S, Excelsior, Curtiss, F. N., N. S. U., M. M., Harley-Davidson, Thor, New Era, Merkel and other high-grade makes from \$35 up.

Practically all styles and makes of automobiles at \$100 up.
We guarantee each purchase to be in perfect running condition.

Agents wanted everywhere.

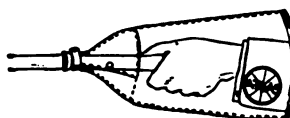
Write for price lists and descriptions.

GREEN'S PURCHASING AGENCY (Dept. M. I.)

1587 Broadway, (Cor. 48th Street), New York City

NOW IS THE TIME TO STOCK UP

With Atlas Fur-lined Hand Windshields and our other Cold Weather necessities.



We manufacture a complete line of Leggins, Magneto Covers, Luggage Carriers, Tail Lamps, etc.

Mohair, Wool lined, per pair, \$1.50.

Leather, Fur lined, per pair, \$2.25.

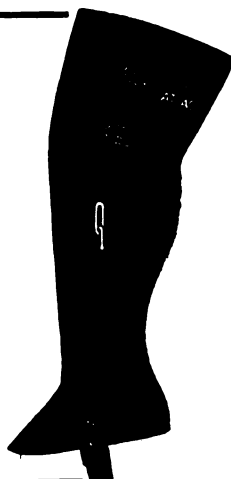
Leather Leggins, \$1.00 per pair and up.

Jobbers and Dealers get our proposition. Write for our up-to-date Catalog.



Atlas Specialty Mfg. Co.

557-83 West Jackson Blvd.
Chicago, Ill.



Monarch

The Sovereign Motorcycle

The "Big 5" Monarch "does things." It can handle a side-car with the ease of a twin. It can climb hills where some twins would stall, and it is built to withstand all hardships—"durability" is its middle name. The Monarch gives royal service.

Send for our catalog!

IVES MOTORCYCLE CORPORATION

200 John St.

Owego, Tioga County, N. Y.

Our "Get Acquainted" Offer

SAVE 50c.



In order to introduce ourselves to the motorcycle rider, we make this exceptional offer on our

Goodwear Hand Wind Shields

Heavy Waterproofed, Arctic Cloth, Wool Lined.

These shields prevent the wind from blowing up the sleeves and afford maximum protection for the hands in cold weather. They're absolutely indispensable.

Send us a dollar with the coupon shown here, which is good for 50c., and we will send you a pair of our \$1.50 Goodwear Hand Wind Shields, all charges prepaid, on ten days' trial. If unsatisfactory, send them back and we'll return your money. Let us send you complete catalog of our "Economy Line."

Go to it!

Goodwear Specialty Mfg. Co.

Office 302

45 W. 34th Street,
New York.

REBATE COUPON - GOOD FOR 50c.

I enclose herewith \$1. Send me a pair of your \$1.50 Hand Wind Shields on ten days' trial. If they don't suit I will return them and get my money back.

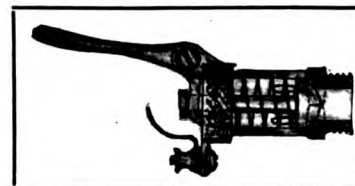
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Would You Look!



Patented
in
Europe

Patented
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at the advantages which are obtained from using the M&M Economizer on your motorcycle?

The M&M is attached to the manifold. It is made with six portholes which admit auxiliary air into the manifold.

It requires but a 1/4-inch pipe tap to insert into manifold.

Will save you from 40 to 50% of gasoline, and will give you 20% more speed and power with less gasoline and less carbon.

It is the only known carburetor adjuster on the market.

It is great for priming your engine.

When going down grades, it cuts off all ignition and gasoline.

PRICE, \$1.25 Prepaid.

This device is nickel plated, highly polished, and absolutely air tight.

Send for full information, and our latest catalogue.

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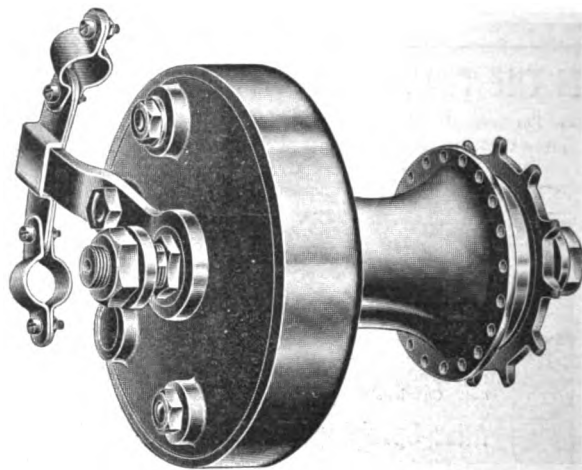
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ANNOUNCEMENT

A Motorcycle Coaster Brake That Is Strong Enough to Hold an Automobile

For some time past the motorcycle trade has felt the need of a coaster and braking device of sufficient power, strength and efficiency to give the rider control of high-powered machines.

The 1913 New Departure will do this and then some. It doesn't require much effort by the average rider to exert a back-peddalling pressure of 75 pounds. In this new model such a pressure will give A BRAKING FORCE OF



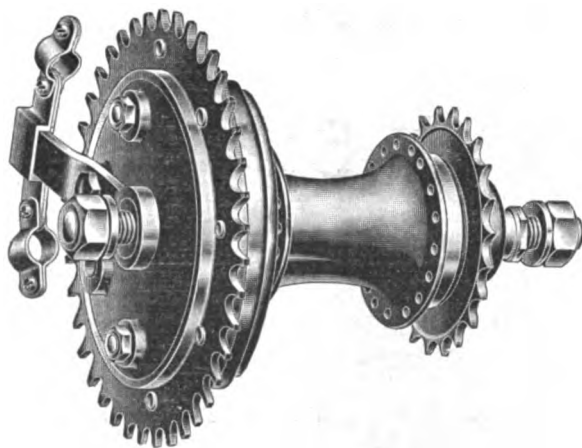
MODEL L

1913 New Departure Motorcycle
Coaster Brake for Belt Drive Machines

ONE AND ONE HALF TONS in the rear hub—a power sufficient to stop an automobile.

The action is positive. There is no possibility of locking. The mechanism is heavy—stronger than necessary.

Every motorcycle expert who has seen it says it is the ideal brake—just what rider and manufacturer have been waiting for. Fully described in new catalog, send for your copy today.



MODEL LL

1913 Model New Departure Motorcycle
Coaster Brake for Chain Drive Machines

The New Departure Mfg. Co., Bristol, Conn.

COASTER BRAKE LICENSORS

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DEALERS! We Make Pennants for the Machine You Handle

Pennants will advertise your machines better than anything else. Every motorcyclist is glad to have a pennant flying from his "bus." And if that pennant contains your advertisement, your machine would be advertised wherever it goes.

We reproduce designs and pictures with lifelike realism. Being manufacturers, we are in position to quote you exceptionally low prices.

We shall be glad to send you full particulars on request. Write us today.

Spiegel Art Co. 119 Broadway, New York

Keep your feet always on the Pedals



The deep rubber corrugations in the big cushions on

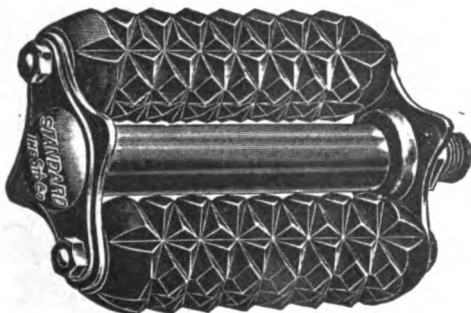
STANDARD PEDALS

keep the feet in the proper position. When going over rough roads, the constant jarring and bumping makes it very uncomfortable for the rider who cannot make his feet stay "put"—not to mention the fact that he cannot readily use his brake.

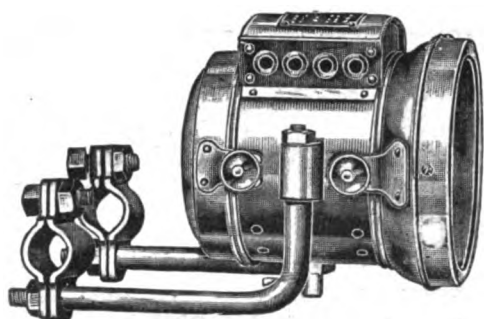
STANDARD PEDALS insure the utmost comfort for the feet. They have been in consistent use by the majority of motorcycle manufacturers for many years, and you can have them on your motorcycle if you insist on Standard Pedals.

Dealers—send for electrotypes and description of our line. It is well worth handling.

THE STANDARD COMPANY
TORRINGTON, CONN.



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MOTORCYCLE SEARCHLIGHT No. 102
Showing Back Closed

Stock Up Now

With the Lamps of "Old Reliable" Quality

20th Century Lamps

MOTORCYCLE AND BICYCLE

Whose popularity and saleable qualities demonstrate that the public want the *best* in lamps. They are recognized as the searchlights with long range power, which throw concentrated rays *directly ahead* where the danger lurks, and they **ARE GROWING GREATLY IN DEMAND** because they afford the utmost in lighting efficiency and protection. Unequaled for quality of workmanship and strength of construction. Over twenty years' experience in lamp building guarantees their excellence. Note "open-door-to-lens" feature in Motorcycle Model No. 102 for easy cleaning purposes.

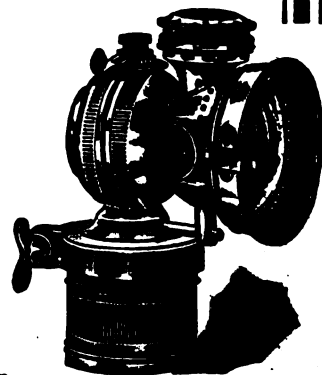
The 20th Century line of Bicycle Lamps are as popular as their motorcycle partners. We will have a very large sale for them in 1913. 20th Century generators are the best in the market. Special non-corroding and non-tightening locking device.

VERY FAVORABLE TERMS TO JOBBERS. Dealers, write us if your jobber doesn't stock 20th Century Lamps

20th Century Mfg Co

Newark, N. J.

IMMEDIATE
SHIPMENT



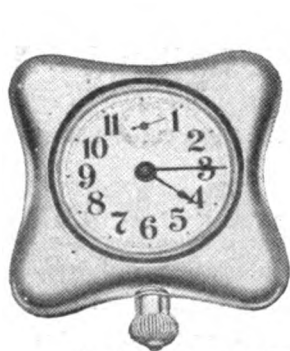
BICYCLE No. 2
Combined Lamp and Generator

DEALERS! In ATTENTION

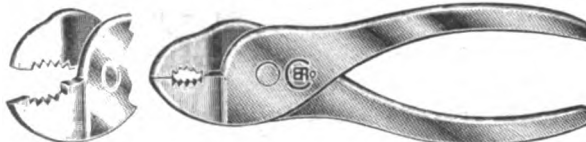
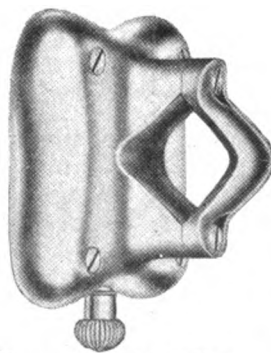
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The Volume of Our Business Insures Prompt Service—Reliable Goods

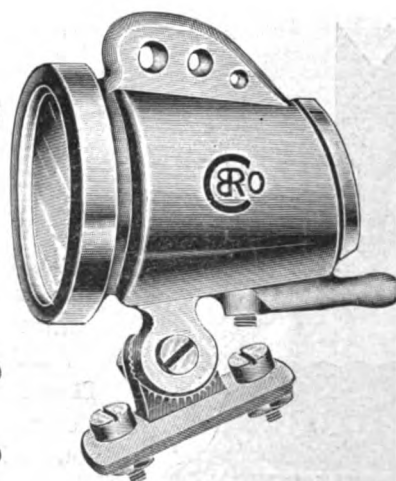
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Luggage Carriers
Magneto Covers
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MICHIGAN AVE.=RANDOLPH ST.

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"EXTRA SERVICE"

TIRES

No tires excel Federal Tires from the standpoint of durability—lasting service—and very few tires are their equal.

The extra service Federal Tires deliver is due to exceptional quality construction.

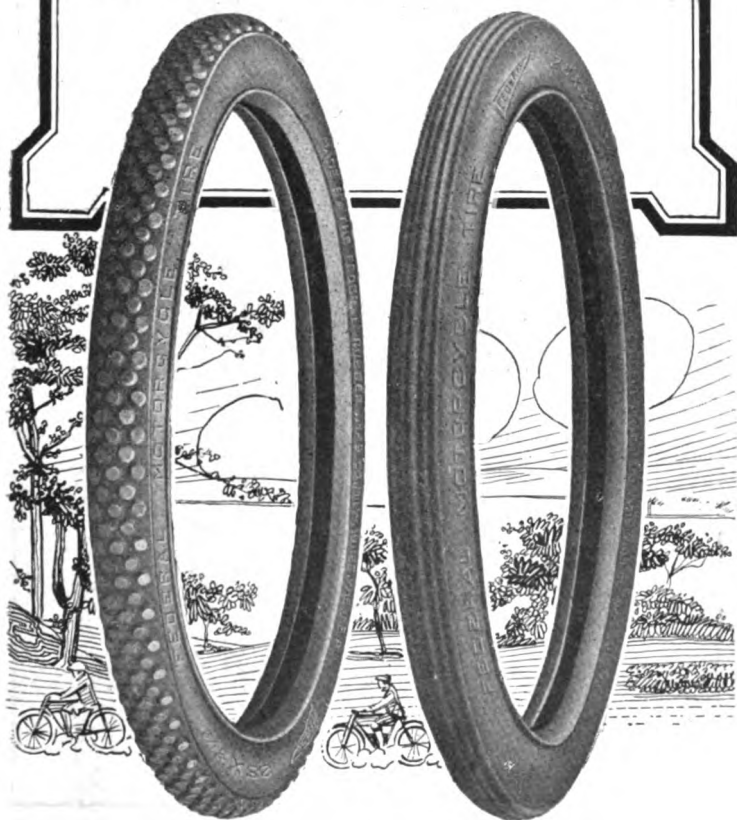
Federal Tires show their class by lasting longer and giving more general satisfaction than other tires—yet they cost no more. *Try Federal Tires and note the extra service.*

Federal Tires are made in Corrugated and Studded treads in all sizes and in single and double clinch types.

They are supplied through leading dealers everywhere. Interesting tire book mailed on request.

Federal Rubber Manufacturing Co., Milwaukee

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Plugs



Enlarged View of the Bosch Plug

THE list of Bosch Plug Victories includes all the larger automobile races of the 1911 and 1912 seasons. They are forceful examples which prove Bosch Plugs to be all that any motorcycle owner could desire.

Intense heat, excessive use of oil or severe vibration has no effect on the added efficiency obtained when Bosch Plugs are used.

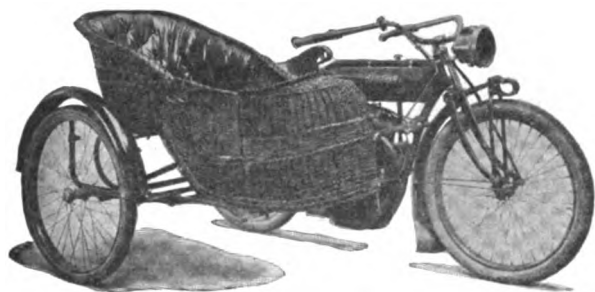
"Locating the Spark Plug"—a booklet of interesting facts—free to those interested

Be Satisfied

Specify Bosch

BOSCH MAGNETO COMPANY
223-225 West 46th Street :: New York

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When You Do Get A
Sidecar Get The
BAXTER

The powerful 1913 motorcycles will make it possible for every rider to attach a sidecar to his machine, whether single or twin. When you buy a BAXTER SIDECAR you are assured that it is

**THE STRONGEST
THE LIGHTEST
THE MOST COMFORTABLE
SIDECAR IN THE WORLD**

Its chassis of seamless steel tubing, double truss frame construction and rigid mudguard give it enormous stability.

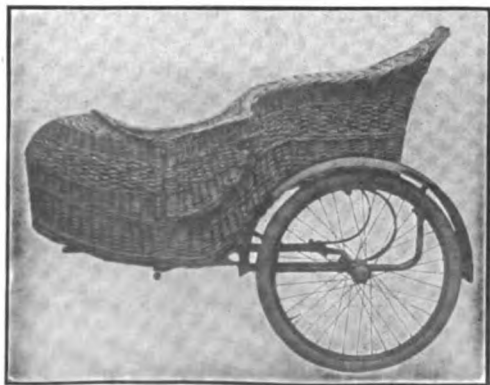
Yet so scientifically is the weight distributed that it has the lightest frame on the market. Then, too, the hub spindles, the most vulnerable points on a sidecar, are turned from solid Bessemer steel.

Comfort is assured by its tension spring absolutely absorbing all shocks, its deeply upholstered basket of India rattan and its racy English shape.

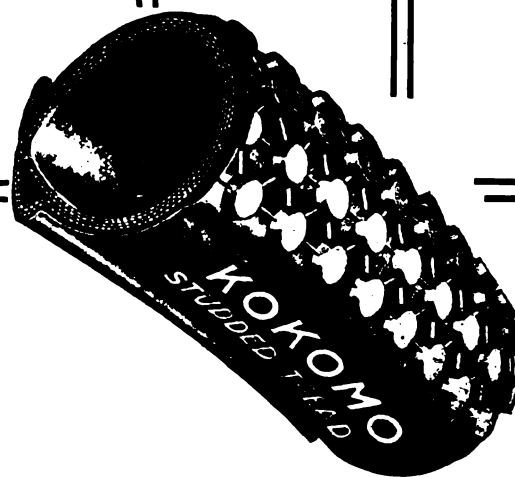
We make sidecars to specification. All parts quick detachable and can be furnished separately.

WRITE FOR OUR CATALOG.

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119 Broadway, Cambridge, Mass.



KOKOMO TIRES



KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

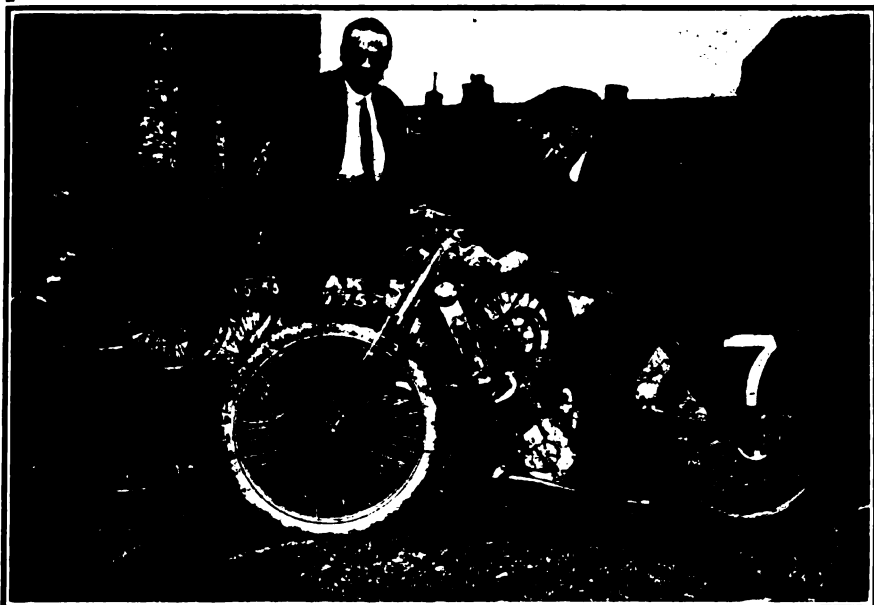
Low Cost
Durable
Efficient
Long Wearing } **TIRES**

Literature sent upon request.

KOKOMO
RUBBER COMPANY

KOKOMO, IND.

The Renold Smile



A WINNER—M. F. A. APPLEBEE.

Tourist Trophy Race, 30 cubic inches.

Scott Two Cycle—187 miles on a mountainous course—48.69 miles per hour.

RENOLD CHAINS were also used on winner of Junior T. T. and most of the other trials of the year.

To the Careful Rider the Renold Chain

has long been known as the BEST. TRY IT OUT and you will find it is the most economical. IT COSTS MORE but wears longer, runs quieter and pays for its increased cost in extra mileage.

Once Tried Always Used

Ask your dealer for RENOLD CHAINS on your new big twin—they will stand the strain. If your dealer can't supply, write us.

PETER A. FRASSE & CO.

417 Canal St., N. Y.

BRANCHES:

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WHY DeLuxe MOTORCYCLE MOTORS EXCEL

BECAUSE OF THEIR

Simplified Design and Reduced Number of Parts

The solid type of construction as applied to the crank case and the crank shaft and the many other improvements bring about a very material reduction in the number of parts in our motors compared with other makes. This reduced number of parts, of course, means proportionately lessened possibilities for trouble.

Watch this space for more details of DeLuxe Motors.

FOUR SIZES

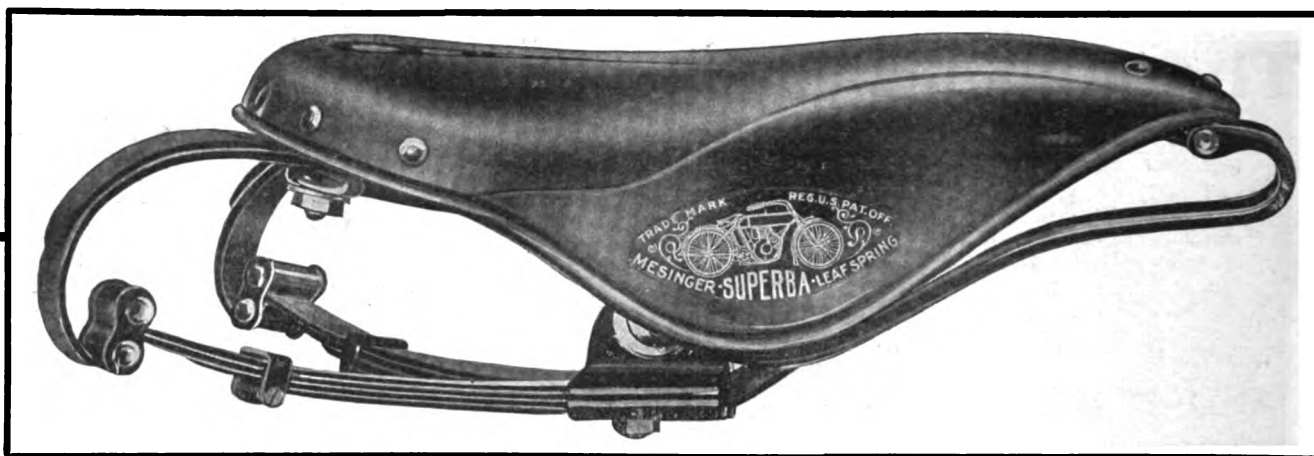
4 H.P. Single Cyl.
7 H.P. Twin Cyl.

5 H.P. Single Cyl.
9 H.P. Twin Special

Motor Data
No. 7

THE F.W. SPACKE MACHINE CO
INDIANAPOLIS, IND., U.S.A.

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The Right Saddle for 1913 Machines

Mesinger Saddles have gone hand in hand with the motorcycle toward the goal of perfection. In

THE "SUPERBA" LEAF SPRING SADDLE

you will find a fitting saddle for 1913 machines. Comfort, durability and strength are combined in the "Superba." Lowest saddle position obtainable.

"Ask the Rider and Watch Him Riding"

H. & F. MESINGER MFG. CO., 144th St. and Austin Place, N. Y.

Here are the Two Strongest "Old Sol" Lamps The Most Powerful Motorcycle Lamps Made

When you order your 1913 machine, get the logical 1913 lamp.

For light-throwing power, for strength of construction, for all-around stability "Old Sol" Lamps hold a distinct place.

"Old Sol" Lamps are made of heavy gauge brass, drawn from one piece of metal, and door frames of special beaded construction to afford the greatest strength. "Old Sol" No. 8 has a light projection of 1500 candlepower, equal to any automobile headlight, and superior to many.

Send for our catalog of the entire "Old Sol" Line

OLD SOL No. 8, PRICE \$6.50

Diameter of door, 8 in.
Candle power, 1500
Brackets per pair, \$1.00

Diameter of lens, 6 in.
Weight, 4 lbs. 2 oz.
Bezel, 50c. extra

OLD SOL No. 17, PRICE \$5.50

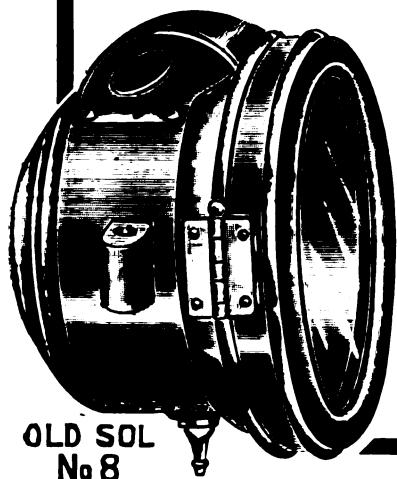
Diameter of door, 7 in.
Candle power, 1000
Brackets per pair, \$1.00

Diameter of lens, 5 in.
Weight, 3 lbs.
Bezel, 50c. extra

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**OLD SOL
No 8**



**OLD SOL
No. 17**

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Look For the "White Strip"

It Means

1. *Guaranteed Stock and Construction.*
2. *Three times the strength of ordinary leather.*
3. *An end to stretching troubles. It is guaranteed not to stretch.*

We make White Strip Stretchless Flat Belts, White Strip Stretchless V-Belts, Sea Lion Waterproof Flat Belts, Chibeco Pulley Laggings, Sea Lion Waterproof Cement and Sea Lion Belt Dressing.

Send for our Catalog—it will interest you

CHICAGO BELTING COMPANY

124 N. Green Street

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To Be Well Dressed

is not an indication of vanity. It is your duty to yourself and to your friends to look well.

Clothes that fit well always look well and wear well.

When you

**BUY
AURORA**

MOTORCYCLE  **CLOTHING**
BRAND

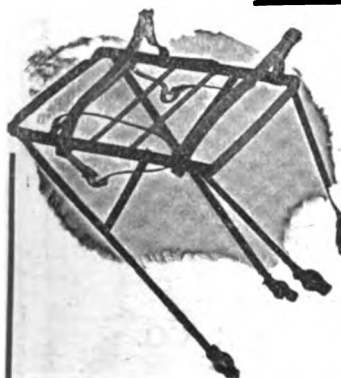
you buy clothing with

**Strength in Every Fibre
Quality in Every Thread**

Made in English Roseberry, English Whipcord, Fustian, Petrels and Khaki.

Dealers, investigate our proposition

Fowler-Carnes Company
Aurora, Ill.



Dealers! Riders!

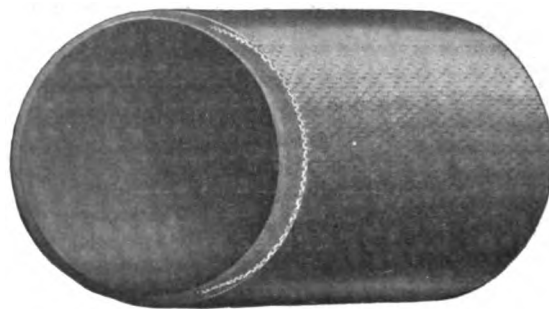
Here's the ideal luggage carrier. Built scientifically—can withstand considerably over two hundred pounds weight. Just the thing for tandem riding. Adjustable to all motorcycles.

The "Star" Luggage Carrier

is sold by the leading jobbers in the country. Write for our catalog.

Star Electric Co., 18 No. May St., Chicago, Ill.

Brown Scientific Non - Deflating Pneumatic Tube



AN AIR FILLED MOTORCYCLE TUBE POSSESSING VERY UNUSUAL FEATURES:

First: It withstands a tread puncture without deflating the tube.

Second: The higher the pressure the tighter the puncture closes.

Third: It eliminates the risk of destroying casings by reason of punctures.

Fourth: The danger of loss of control of machine is removed.

Fifth: It assures you of not being obliged to repair a puncture on the road and gets you "there and back" on full tires.

AIR FILLED ONLY

Punctures are self-closing by reason of a scientific but simple principle of construction.

**NO "DOPE," GUM, PASTE OR OTHER
STUFFING MATERIALS.**

Write for prices, full description and sectional sample.

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JERSEY CITY, N. J., U. S. A.

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38 Vesey Street

BOSTON STORE
280 Columbus Ave

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Better Get A JONES SPEEDOMETER

Know how fast and how far you travel. Get a complete record of trip and season mileage.

These instruments possess identically the same workmanship and material as the JONES for automobile service.

Attached to any make of machine.
Strong, sturdy, substantial.

At all good dealers.

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San Francisco: 530 Golden Gate Ave.

Buffalo: 20 Goodrich St.

Los Angeles: 1229 S. Olive St.

Portland: 329 Ankeny St.

Seattle: 917 East Pike St.

Detroit: 870 Woodward Ave.

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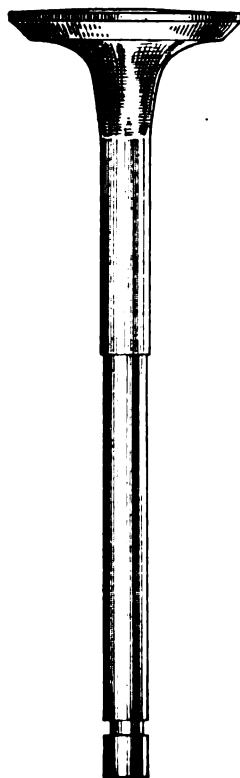
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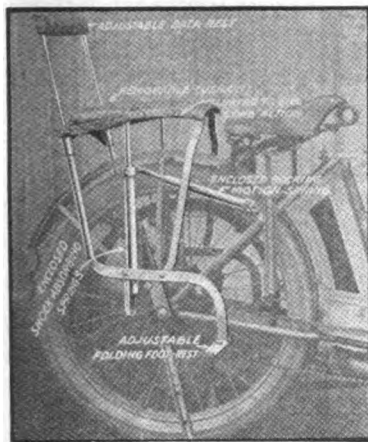
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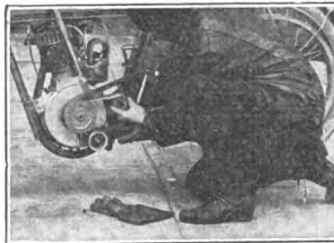


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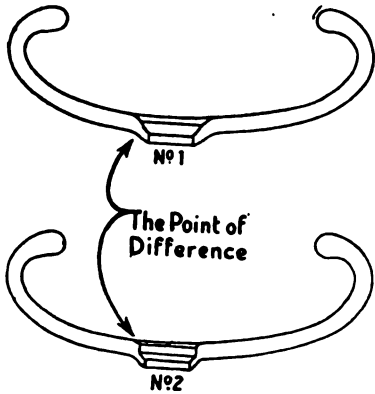
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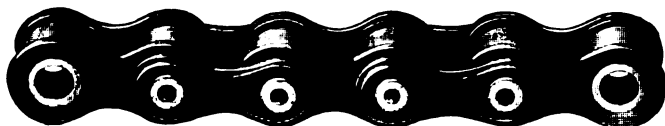
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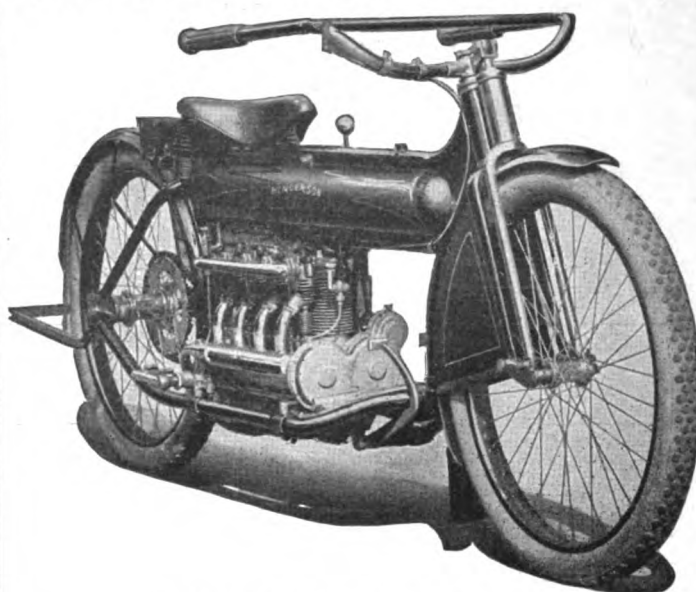
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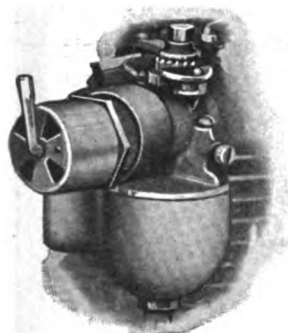
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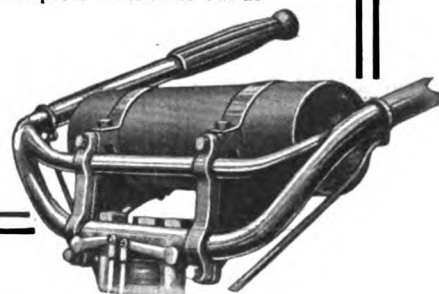
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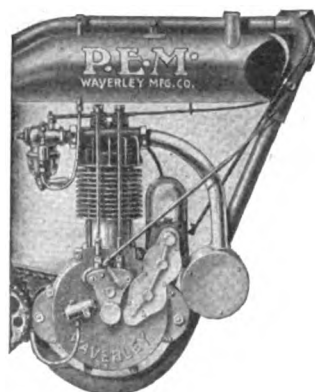
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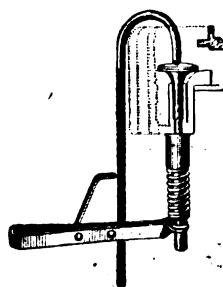
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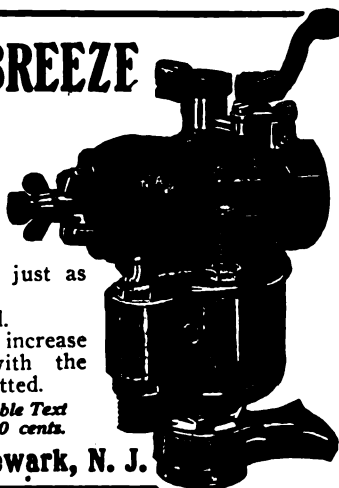
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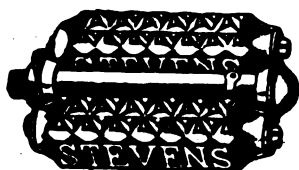
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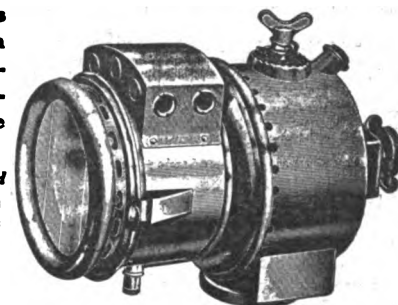
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The Corbin Screw Corporation Division

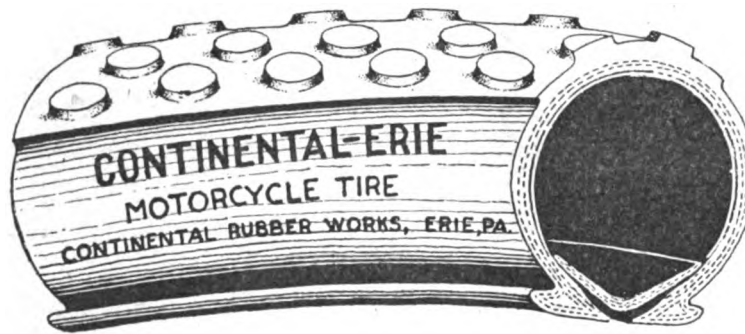
(THE AMERICAN HARDWARE CORPORATION)

New Britain, Connecticut

Licensed Coaster Brake Manufacturers

Western Office, 65 West Lake St., Chicago, Ill.

Continental- Erie Tires



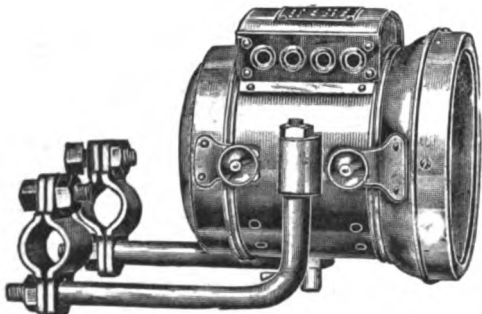
**"They're
Built
to Last"**

LIFE!

THE tire that gives the longest **efficient** service is the tire for **you**. Continental-Erie tires are made in but one tread—the studded—and the attention which would otherwise be divided among different molds is concentrated on the perfection of the studded tread. Years of experience have taught us the superiority of the studded tread for hard service. The studs grip the road and only when they're entirely worn off does the actual wear on the tire begin.

Add carefully selected, high grade materials and conscientious, concentrated manufacturing methods to the undoubted advantages of the studded tread, and you have the **ideal tire** in point of **efficient service**—the Continental-Erie.

CONTINENTAL RUBBER WORKS - - Erie, Pa.



MOTORCYCLE SEARCHLIGHT No. 102
Showing Back Closed

LOOKING AHEAD

that is the only direction in which progressive jobbers and dealers must look if they wish to build up business. Proper preparation to meet popular demand spells the difference between success and failure.

20th CENTURY LAMPS

(Motorcycle and Bicycle)

are business bringers, because they are always growing in popularity and demand. They are the lamps to look ahead with.

Unequaled for Lighting Efficiency, Practically Indestructible. Handsome and Compact.

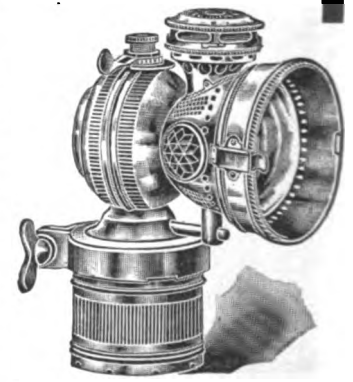
Riders appreciate the long range power (straight ahead) of the 20th Century Lamps, their unfailing Reliability and Simplicity. Note "open door to the lens" feature, for easy cleaning purposes, in Model 102. 20th Century Generators are much superior to the average. Special non-corroding and easy operating locking device is an appreciable feature.

Jobbers, Stock Up Now. Write for New Terms and Prices. Don't Wait for the Rush

20th Century Mfg Co

420-22 Ogden St.
Newark, N. J.

**IMMEDIATE
DELIVERIES**



BICYCLE No. 2
Combined Lamp and Generator

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

Are You "Afraid to Come Home in the Dark?"

Do you therefore stay close at home, or else creep in slowly, in fear and trembling?

If so, you are missing most of the joy of motorcycling. A **RELIABLE** source of light, with a lamp large enough, will make night riding pleasant and **SAFE**.

A gas generator won't fill the bill, because it is not reliable, and is also a troublesome nuisance. Neither will small generator lamps meet your requirements.

Prest-O-Lite is your **ONLY** source of satisfaction—the **ONLY** practical lighting system for motorcycles.

Floods the road far ahead with brilliant light, **STEADY**, unflickering under all conditions. Turned on and off like a gas jet.

Prest-O-Lite Owners



Paul C. Stallpomp, 205 West First St., Delphos, Ohio, finds his Prest-O-Lite Motorcycle makes night riding pleasant and safe. It is the light that never fails.

Prest-O-Lite

Shows up the bumps, ruts, puddles, etc., as no other lighting system can do.

Wherever you may be exchange service may be had from one of our 20,000 dealers (motorcycle and automobile). We will arrange for prompt service for anyone, anywhere.

Expensive? Not at All!

Any experienced rider will tell you that Prest-O-Lite service costs no more—usually

costs less—than the carbide a generator consumes.

And the money you invest in the tank itself is not **SPENT**, because a genuine Prest-O-Lite Tank never gets to be second-hand, is always in demand, and is always a **READY CASH ASSET**.

No rider can afford to be without this combined **CONVENIENCE**, **PLEASURE** and **INSURANCE**. One accident due to poor light might cost you more than a year of Prest-O-Lite service.

Price \$10

(Equipped with Gauge)



Dimensions: Length, 13¼ inches; diameter, 4 inches; weight, 8¾ pounds. 40 hours of light. Easily attached to any motorcycle.

Don't Let Anyone Cheat You With an Imitation

The genuine Prest-O-Lite, when empty, can be immediately exchanged for a full one **ANYWHERE** and **ALWAYS**. Imitations cannot.

The dealer who slips on a counterfeit in exchange for your Prest-O-Lite gets the best of you. Don't let him!

We will not be responsible for short measure or poor gas in tanks not filled by us.

The Prest-O-Lite Co. 246 E. South St. INDIANAPOLIS, IND.

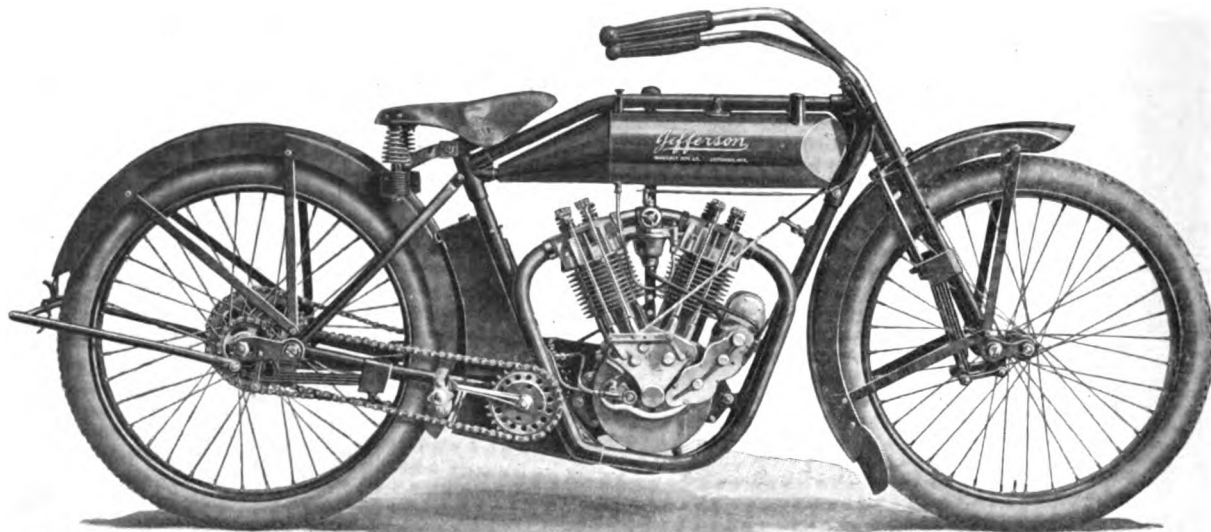
Branch offices in all principal cities. Charging plants in all parts of the country. Extensive foreign service.

EXCHANGE AGENCIES EVERYWHERE

Mr. Dealer: It requires only a little effort for you to increase your Prest-O-Lite business. The plain **FACTS** about Prest-O-Lite, told to your customers, will make sales.

And don't get your customers into the habit of going elsewhere for Prest-O-Lite exchanges if you want to retain their trade on other things.

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.



Ride The New 1913 Jefferson Twin

***Ride the Jefferson Twin if you want speed
Ride the Jefferson Twin if you want comfort
Ride the Jefferson Twin if you want power
Ride the Jefferson Twin if you want reliability***

THE Jefferson VII or Twin is years ahead of its contemporaries in all the above points. Why—because the quality is built into the machine—they are made for service—long and hard, rather than to sell.

The Jefferson VII is merely an evolution from the Jefferson IV or single, which, under the name of P. E. M. last season made such a wonderful record of success both on road and track. As good as the 1912 model was, we were able to make a few improvements which place the two 1913 models far ahead of any competitor at any price.

We can give you a few of the specifications of these two “benzine bikes” which tell the mechanical perfection of these machines, but all we could say—all we could write—all that we could picture, would be futile. We simply can’t describe the wonderful comfort of the original cradle frame, hung on 4 automobile springs—nor the intoxicating speed—it’s there—and without vibration of the motor either; nor the power, nor the reliability—except to say that every Jefferson that leaves our factory has stood the test. Words fail—you simply **must see; must ride** a Jefferson—and then you’ll know.

Let us try to tell you a little about the two Jeffersons—IV and VII.

FOR SPEED—In 1912 the Jefferson IV (then the P. E. M.) entered 47 races—and won 37 firsts and 10 seconds, and 6 of these firsts were against twins. (Write to us for our book—“A Record of our Record”—it tells all about these events.)

FOR COMFORT—The frame is hung at both front and rear hubs on Automobile leaf springs. This kind of spring has no “kick back” like the spirals. As the original cradle frame with leaf springs, being covered with patents, there is none so smooth on rider and engine and none so lacking in side swing as the Jefferson.

FOR POWER—The Waverley Engine—with its high compression chamber—overhead me-

chanical valves—large parts and Bosch Armored Magneto, gives a power above its rating—and without vibration or racking because of its very even balancing.

FOR RELIABILITY—Every engine is “block tested” then mounted in the frame—the machine assembled and then road tested till it passes our very rigid requirements for smoothness—power—control—elasticity—comfort—and then, and not until then, is it crated.

FOR PRICE—In spite of the fact that the Jefferson is so much better its price is lower than many less desirable competitors. The Jefferson IV, or single, sells for \$225.00. And take our word for it—the quality was put in before the price was put on.

The Jefferson VII, or twin, sells for \$275.00.

DETAILED SPECIFICATIONS

JEFFERSON IV

FRAME—Loop or cradle—extra large tubing—reinforced at brazings with sleeves instead of slugs. Hung on 4 Automobile leaf springs—one each side each hub. At rear allows back wheel to move vertically; absorbs all shocks and jars.

THE CUSHIONED FORK is similarly constructed. Springs are vanadium steel—very elastic and unbreakable. Fork in bridge truss giving rigidity and strength.

MOTOR—Rated Four Horse Power, Single-Cylinder— $3\frac{3}{8}$ " bore—3 $\frac{13}{32}$ " stroke. One-piece cylinder head—with large parts—mechanically operated overhead valves, giving quick firing and high power.

CARBURETER—Heitger Automatic—glass bowl.

LUBRICATION—New positive, mechanical, to crank case.

IGNITION—Bosch Armored Magneto, Gear Driven.

These give a few of the major advantages of the Jefferson. Write for booklet telling more about them—you will be interested.

DEALERS—We have a liberal proposition to dealers in unassigned territory. Any man who wants to handle a winning line should secure the “Jeffersons.”

JEFFERSON VII

FRAME—Same as IV, except tubing of loop is slightly larger.

FORK—Same as in IV.

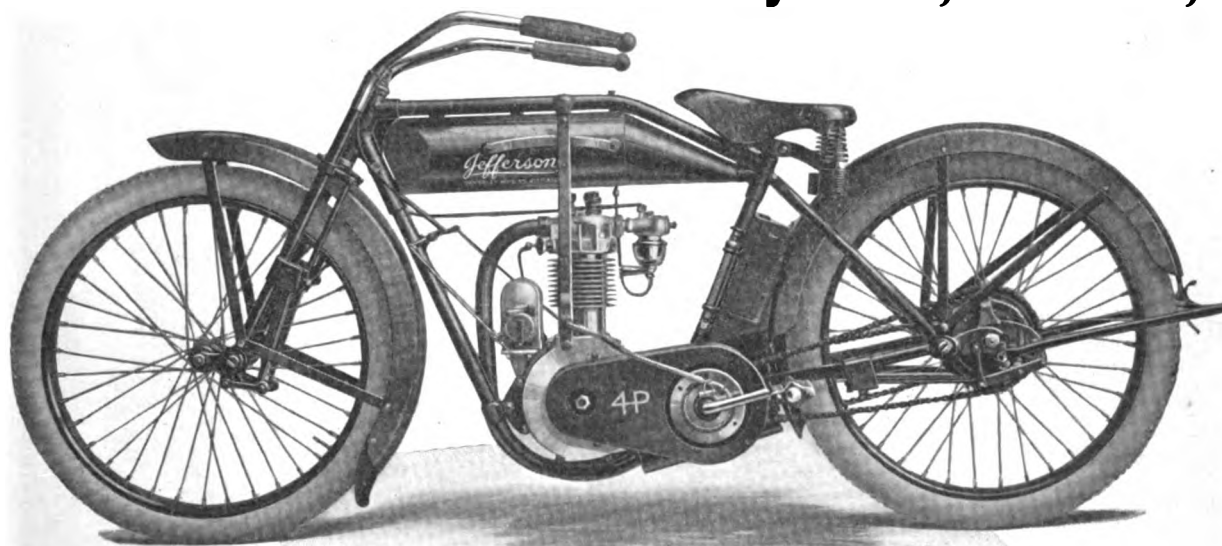
MOTOR—Rated Seven Horse Power, Two-Cylinder— $3\frac{3}{8}$ " bore. One-piece cylinder head—large parts—mechanically operated overhead valves, giving quick firing and high power.

CARBURETER—Same as IV.

LUBRICATION—Same as IV.

IGNITION—Same as IV.

WAVERLEY MFG. CO. - Waverley Place, Jefferson, Wis.



When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



Model H—Lightweight	- -	\$165
Model K—4 H. P. Belt Drive		\$200
Model M—4 H. P. Chain Drive		\$215
Model L—Twin	- - - -	\$250

***Four Models—Four Prices—One Quality
of Material and Workmanship***

The Pope Line for 1913 is thoroughly up-to-date and thoroughly cosmopolitan. There is a model for every present or prospective type of rider and for every individual taste or personal preference. The prices are right—the machines of the very highest quality—and the range is wide.

Analyze the demand as you know it, and see how completely the various models in the Pope Line listed above, meet it. Four Distinct Models, Four Prices, ONE QUALITY.

OVERHEAD VALVES—make for High Compression, Quick Ignition, Positive Exhaust, and Direct Downward Thrust of the piston. This is the same principle applied so successfully in the design and operation of Pope-Hartford automobile engines, which are probably unequalled by any other motors of their size for power and efficiency. Similarly the Pope type of valve-in-the-head motorcycle engine develops the maximum of power for its dimensions.

1913 Motorcycle Catalog Now in Preparation. Send in
Your Name for one of the early copies

THE POPE MANUFACTURING COMPANY, Hartford, Conn., U.S.A.

PACIFIC COAST DISTRIBUTORS:

F. P. KEENAN CO., PORTLAND, ORE., Northwest

KIMBALL-UPSON CO., SACRAMENTO,
Northern California and Nevada

C. L. SMITH, LOS ANGELES, Southern California

TIRE PROTECTION WITH A GUARANTEE

No longer is it necessary for motorcyclists to worry about PUNCTURES, BLOW-OUTS, GLASS CUTS, SKIDDING and unnecessary tire expense, which heretofore has MARRED the pleasure of all motoring—"BRICTSON" DETACHABLE TREADS will eliminate all this.

10,000 Mile Guarantee

SEND FOR COPY OF SAME

Yes, we will give you a 10,000 mile written guarantee with every "BRICTSON" MOTORCYCLE TREAD on a daily mileage basis of twenty-five miles per

day. Can you get this kind of a guarantee on your rubber tires? Figure this guarantee out and you will see that it covers a period of 400 days.

Design and Construction

Made of select, specially prepared chrome tanned leather, soft and pliable, which gives with the "BRICTSON" the full benefit of the pneumatic tire. Studded on the surface with small neat-looking steel studs, designed to give perfect traction as well as a perfect "non-skid." There are layers of the best tire fabric between the layers of leather, which add strength and keep the tread from stretching. In addition to all these important features, the "BRICTSON" is lined perfectly smooth on the inside so there are no rivets or studs in contact with the rubber casing, making it impossible for the tread to injure the casing in any way.

The "BRICTSON" is the only scientifically constructed tread in that it CANNOT slip or slide on the rubber casing in ANY direction, owing to the patented, scientific method of fastening. It is held in position on the rubber casing by equal tension from all points of the circle, and for this reason may be adjusted to PERFECTLY fit the casing over which it is applied, which CANNOT be accomplished with any other method of fastening, and also envelops the entire casing, excluding sand, stones, mud, or even water from coming in contact with the rubber casing.

The "BRICTSON" is the ONLY TREAD THAT HAS PERFECT TENSION ADJUSTMENT FROM ALL POINTS OF THE CIRCLE, which other tread manufacturers have tried to imitate with metal contrivances that only detract from the appearance of the tread, add weight, and destroy the pneumatic feature, but still do not accomplish the desired result.

The "Bricton" Exclusive Patented Way of Fastening

The "BRICTSON" has no HOOPS, HOOKS, BUCKLES, SPRINGS, or any other unnecessary metal contrivances to add weight, break or eat into the rubber casing; neither is it cemented, laced, vulcanized, riveted or fastened to the rubber casing in any way—NATURAL INFLATION OF THE TIRE DOES THE TRICK—Simply clamped between the head of casing and rim—strictly Quick Detachable.

PRICES: One-half the price of a rubber casing and guaranteed three times as long. Compare the following prices:

26 x 2 1/4	\$6.05	28 x 2 1/2	\$7.43	29 x 2 3/4	\$8.15
26 x 2 1/2	6.60	28 x 2 3/4	7.70	29 x 3	8.25
28 x 2 1/4	7.15	28 x 3	7.98		

Other sizes on application.

Ask Your Dealer for "Bricton" Detachable Treads

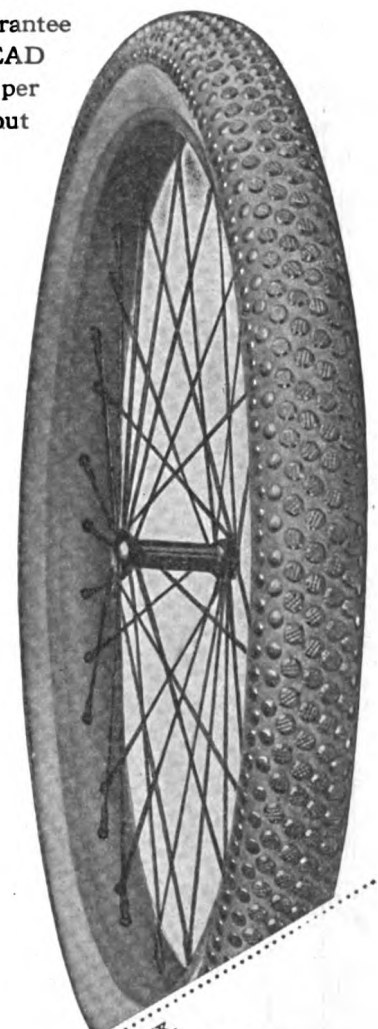
Ask the best dealer in your town to show you the famous "BRICTSON" Guaranteed Detachable Tread. If for any reason he cannot supply you, fill out the attached ORDER BLANK, pin your check to same, mail it, and I will ship you the treads on TEN DAYS' FREE TRIAL, and if you don't find them perfectly satisfactory within 10 days from receipt of treads, return them and I will cheerfully refund your money. Remember, I take all the risk.

O. A. BRICTSON, President
The Bricton Mfg. Co.
25122 Bricton Building
Brookings, South Dakota

O. A. Bricton,
President,
The Bricton Mfg. Co.,
25122 Bricton Bldg.,
Brookings, So. Dak.
Without obligation on my part,
send me your Dealer's Prices Catalogue and full particulars.

Name.....
City..... State.....
County.....

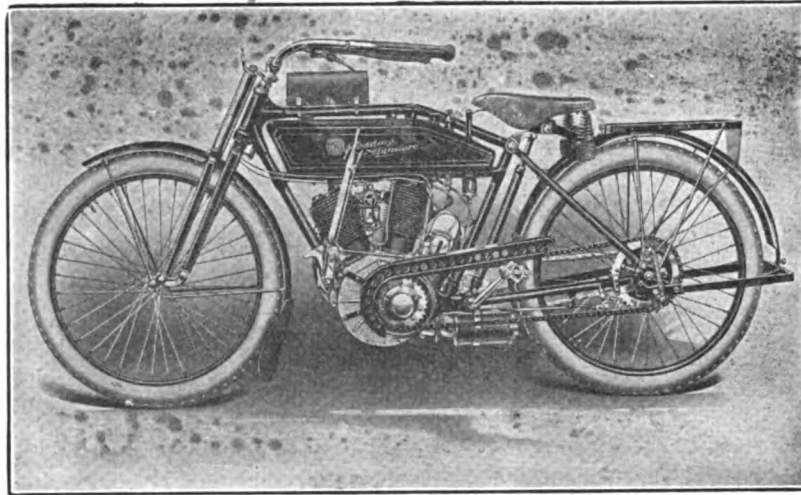
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O. A. Bricton,
President,
The Bricton Mfg. Co.,
25122 Bricton Bldg.,
Brookings, So. Dak.

Enclosed please find.....
in the sum of \$.....for which
ship by ex. or fgt.....(quantity).....Bricton
Motorcycle Treads, size.....with the understanding if they
are not perfectly satisfactory I may return them within 10 days
from receipt of shipment and you will refund my money.

Signed.....

R-S**R-S****R-S Twin—Chain Drive - - \$275**

There Is No Other Free Engine Clutch as Good as the One on the R-S

We say this advisedly—and on this point all dealers and manufacturers agree. There is **one** very good reason for this: the “R.-S.” Cone Clutch is fully patented.

We have not been so fortunate—or farsighted enough—with other hitherto exclusive “R.-S.” details of construction.

When mechanical valves were introduced into this country, the “R.-S.” was the first to adopt them. Now every 1913 motorcycle is so equipped. Footrests were practically unknown in this country until their fitment on the “R.-S.” Now two or three manufacturers are proudly boasting of these desirable adjuncts to their machines.

But—

the “R-S” Cork Insert Cone Clutch—double-oiling system, double brakes, the “R.S” shock-absorbing spring seat posts, adjustable to weight of rider, and last but by no means least, the inimitable

“R-S” long stroke motor with integral cams and gears, imported ball bearings, and perfect cooling system, still gives the “R-S” the undeniable right to the title of

THE FINEST MOTORCYCLE IN THE WORLD

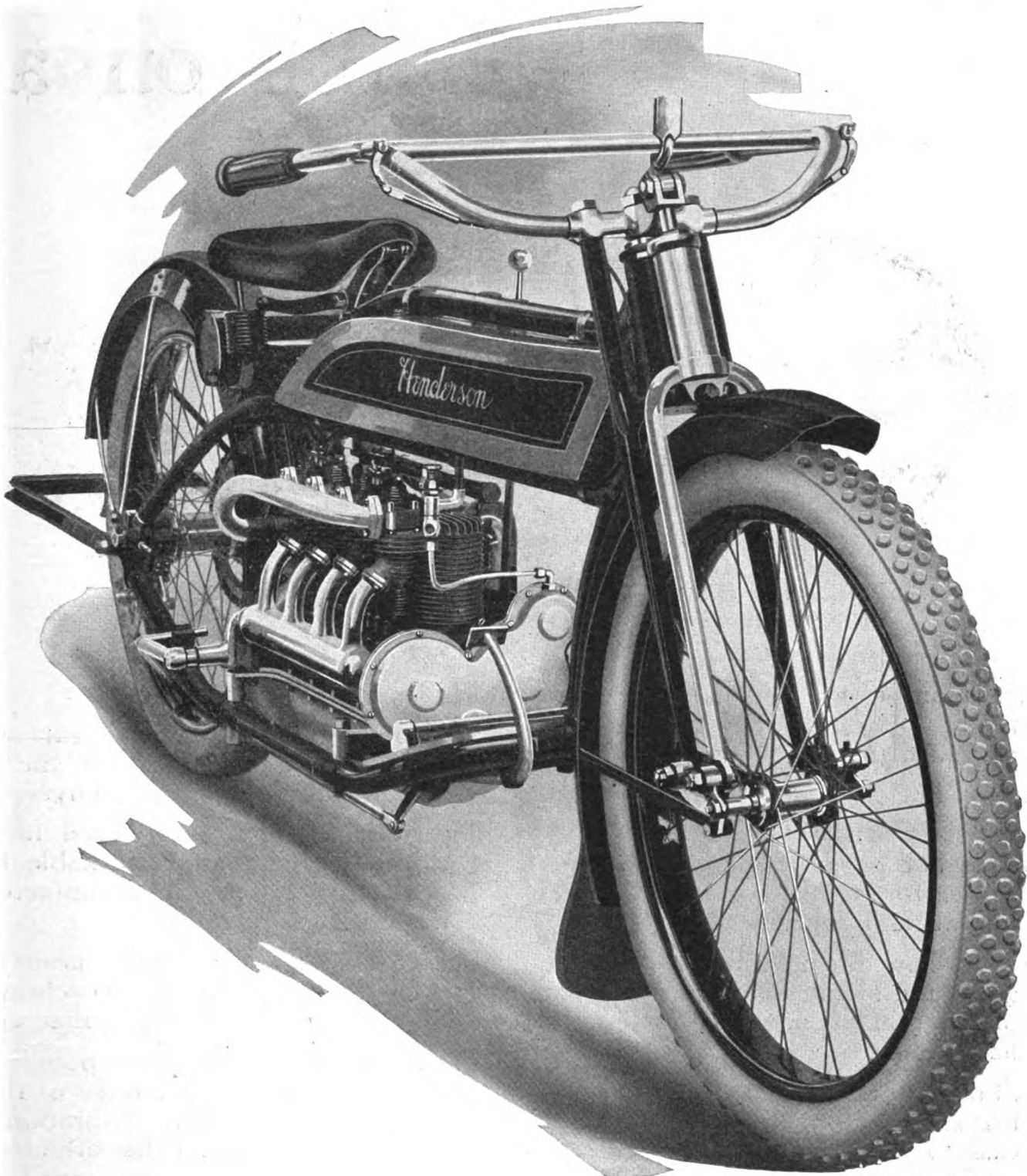
MODELS

Twin	- Chain Drive	- \$275
Tourist	- Belt or Chain	- 225
Service	- Belt Drive Only	200

Reading-Standard Co.

306-340 Water St., Reading, Pa.

1913 HENDERSON

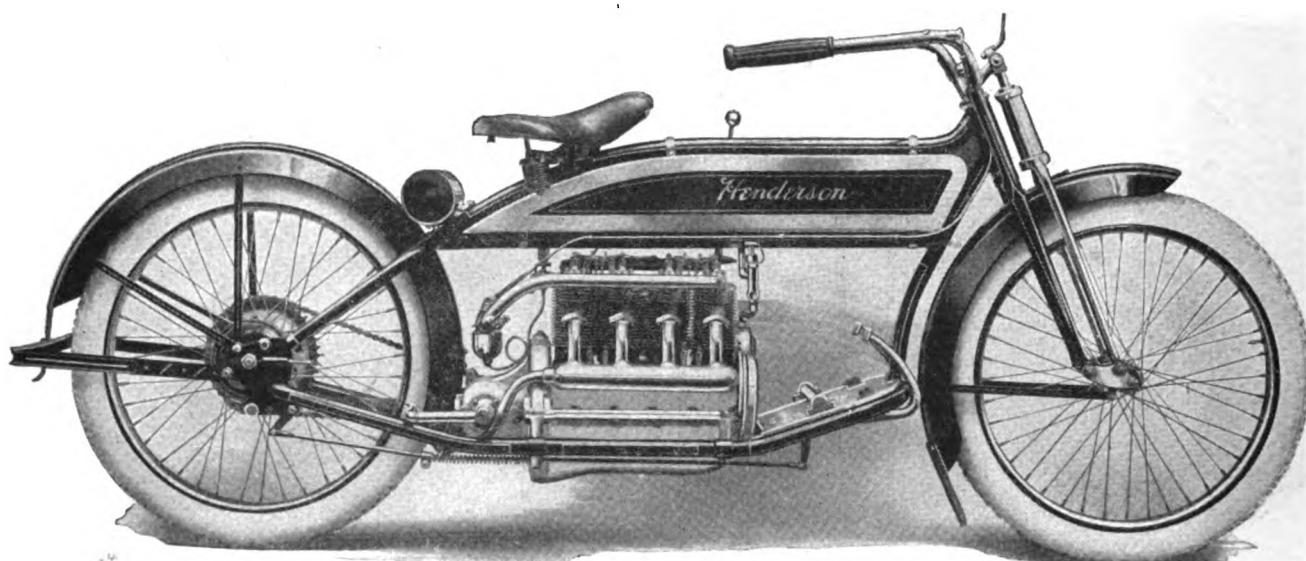


8 H. P., \$325

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Avenue, DETROIT, MICH.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Read this and you'll know will roll on and



The 1913 Henderson, 8 H. P., 4 cylinders, \$325
free engine, chain drive

Two months ago we had just completed our first experimental machines for 1913.

No one outside the factory knew a thing about our plans for the coming year.

Yet we had on our books at that time, orders for more than half the 1913 output, and deposits to cover.

That is how the motorcycle trade regards the Henderson, after one year of the greatest success this industry has recorded.

And back of the trade, justifying a confidence that impels the payment of cash for something not yet produced, stands the motorcycle-buying public, eager for the Henderson.

This machine is a year old.

And it begins its second year with prospects that are bright for the live dealer and the discerning buyer.

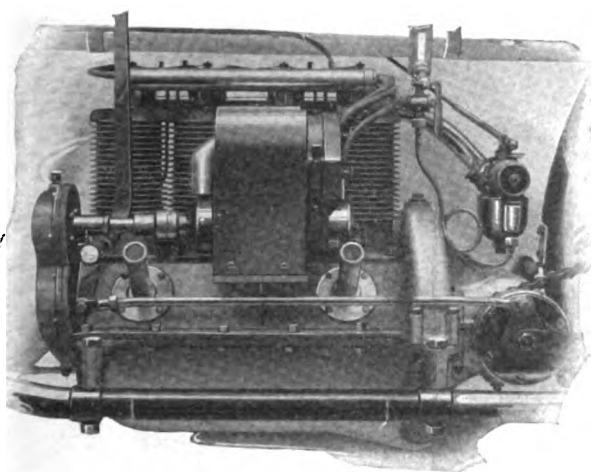
The year that has just closed for us stands as the most remarkable first year any motorcycle manufacturer has had.

Because we built and sold more machines than any other motorcycle manufacturer has done in his first year.

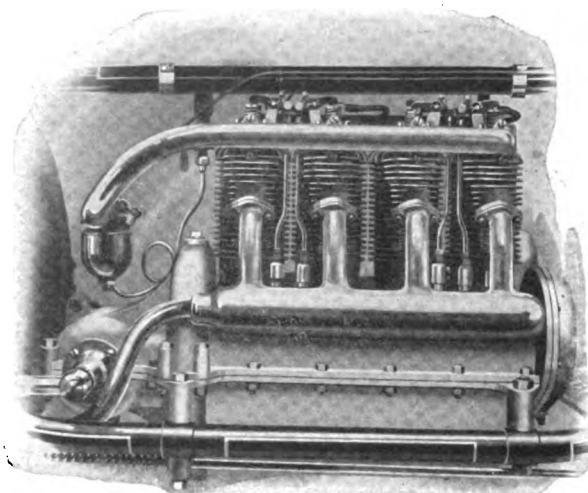
The reason for the Henderson popularity is that it confers advantages of flexibility, smooth, silent, vibrationless running and comfort that are utterly impossible with the motorcycle of any but the four-cylinder type.

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Avenue, DETROIT, MICH.

why Henderson popularity on during 1913



Left side of motor



Right side of motor

SPECIFICATIONS

Motor—Four cylinder, $2\frac{5}{8}$ " bore, 3" stroke, 65 cubic inch displacement, L head.

Starting Crank—Folding design, Henderson patent.

Carbureter—Schebler.

Valves—Mechanically operated.

Ignition—Bosch magneto, D U 4. 60-degree range, fat, hot spark.

Muffler—Sealed joints; silent, no back pressure; nicked and polished.

Lubrication—Splash system with sight feed.

Control—Double grip.

Handle bars—U-shaped, with brace.

Transmission—Chain drive, free engine.

Clutch—Eclipse.

Tank—Square type, divided for 3 gallons gasoline, 2 quarts oil.

Frame—Cradle type, $1\frac{1}{4}$ ", 13 gauge tubing.

Fork—Triple stem, with 2 large springs.

Wheelbase—65", easy riding.

Wheels—28", standard.

Tires—28 x 3", front and rear—large and easy riding.

Brake—External band, Henderson design. Extremely powerful and simple.

Foot-board—Aluminum, roomy, with rubber foot-pads.

Tool bag—Round metal—with complete set of tools.

Finish—Enameled royal blue and aluminum, with striping; highly nicked motor.

Stand—Henderson special, one piece.

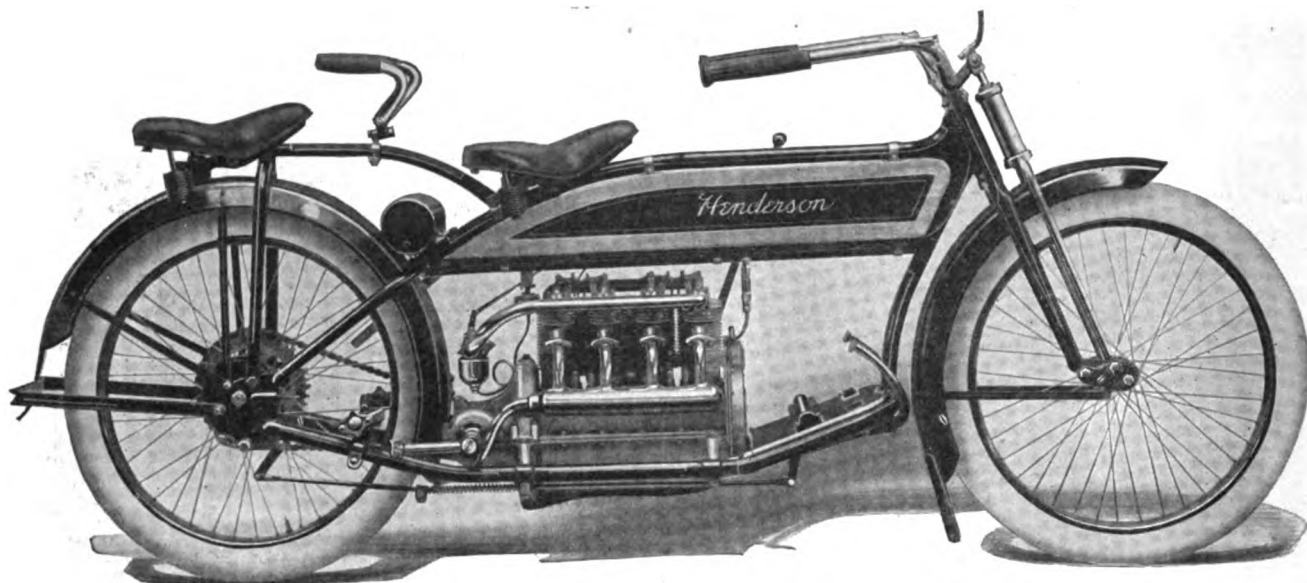
Saddle—Special Henderson-Persons.

Price—\$325, F. O. B. Detroit.

Tandem—\$25, complete.

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Avenue, DETROIT, MICH.

See how the tandem seat is exactly over the axle



Tandem attachment complete, with grips, \$25
foot rests, skirt guard, etc.

The center of the tandem saddle of the Henderson is directly above the rear wheel axle.

You know what that means—and you know how eagerly the riders will take to it.

This construction means the elimination of back-lash, because there is no overhang; the machine is always in balance; it rides easier for two, both for the driver and the passenger.

You can see, too, that the Henderson tandem is neither a makeshift nor an after-thought; but simply a removable part of the machine.

The main saddle is slightly lower, owing to an improvement in the shape of the frame.

Yet these are incidental in the Henderson's list of superiorities—most of them proved by a year's successful use:

The four-cylinder engine, increased to 8 H. P.; the triple stem fork of amazing strength and riding ease; the simple, easily adjusted, powerful band brake; the tires, big and easy riding, 28 x 3 inches.

So this is the 1913 Henderson—the motorcycle that will make the Henderson popularity roll onward and onward.

If you want a live proposition, write or wire; your territory may not be closed.

HENDERSON MOTOR CYCLE COMPANY, 1158 Cass Avenue, DETROIT, MICH.

WHY THEY BUY STANDARD FRAME PARTS

Buyers of all kinds of material prefer to transact business with well established concerns. This fact is true of individual consumers, as well as of quantity consumers.

Little do you care what a salesman says about quality, service or price, if the company making the product has no reputation for these things.

The Standard Welding Company stands pre-eminent in the motorcycle industry. Our proof of this statement is this fact:

*That from May 1st, 1912, to June 30th, 1912, we received specifications equaling 83.9% of our total 1911 business. These specifications cover **rims, pulley rims, mud guards, forksides, rear forks, rear stays, loop tubes, handle bars, seat posts, exhaust tubes and straight lengths of tubing.** The buyers of this material include manufacturers who will produce from May 1st, 1912, to April 30th, 1913, 100 to 25000 machines each.*

A company that can individually transform this tremendous amount of raw material into the finished product is the type of organization that you, whether manufacturer, jobber, dealer or rider, want to deal with.

The high reputation of the American-made motorcycle of today is due largely to the excellence of our material. Foreign manufacturers acknowledge American machines to be the strongest made. While we do not attempt to claim the whole compliment, we do claim, as manufacturers of over 75% of all frame tubing, rims and mud guards, that the pride which you are justified to have in your machines is due largely to the perfection of

*"Standard" rims, "Standard" mud guards,
"Standard" tubing. Standard Welding
products represent the "Utmost in Utility."*

THE STANDARD WELDING CO.

CLEVELAND, O.

OFFICES IN

NEW YORK

CHICAGO

DETROIT

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

EFFICIENCY

EFFICIENCY means the ability to "make good." Efficient transmission is, therefore, transmission which makes good—which comes as nearly as possible to perfection in service.

It is not the efficiency of a transmission when new that counts, but the general efficiency of the transmission during its useful life. The longer the useful life, the longer will the efficiency be retained. When first applied to a motorcycle, the transmission may be **high** in efficiency, but if wear is rapid, misalignment frequent and its effect destructive to the various parts of the transmission, the transmission itself is inferior to one which has a **lower** initial transmissive efficiency, but which retains this efficiency during its entire life. Furthermore, if such a transmission besides giving more continuous efficient service, retains its life for a longer period, or is more lasting, it is assuredly to be preferred to one whose **initial** efficiency **only** is higher. A "V" belt drive's efficiency when new is 95% of the power given off by the motor and its percentage of reduced efficiency during, say, a life of 3,000 to 4,000 miles will not exceed 7% to 8%. The initial efficiency of a flat belt is slightly lower and the reduction depends on the treatment given the belt by the rider.

The **initial** efficiency of single chain drives is 97%. This high figure, however, is quickly reduced by the wear of the chains and sprockets due to misalignment and other causes. Chains in poor condition will sometimes deliver only 80% of the power, and very few chains in any case will be efficient for more than 2,500 miles. Then, too, of great importance is the general efficiency of the motorcycle as affected by the transmission. It is obvious that the transmission which longest keeps the machine in good condition, and that produces the greatest degree of satisfactory service with the least general and specific upkeep, is the most efficient form of transmission.

Belt Transmission causes less trouble and expense than other forms in that it is not seriously affected by a misalignment, which causes other transmissions to wear appreciably and frequently results in costly replacements.

Belt Transmission insures minimum wear of the power plant and frame, as its

flexibility absorbs all road shocks, which, by a more positive form of transmission, are communicated to the entire machine.

Belt Transmission causes less wear to bearings and gears than any other drive, because of its slippage under abnormal loads, such as quick starting, etc., in contrast to a more positive method of transmission.

Belt Transmission assures a high degree of comfort, on account of its smooth action when starting, and its elimination of overload shocks when accelerating or diminishing speed.

Belt Transmission is more cleanly than other transmissions, requiring less frequent lubrication, and the use of a lubricant more easily and neatly applied.

Belt Transmission is the least complicated, hence the least liable to get out of order.

Belt Transmission is more silent than other transmissions, as no metal touches the pulleys—in revolution leather touches metal, not metal to metal. Furthermore, the belt in its makeup has no small metal parts to loosen, rattle and clank.

More Economical and less troublesome; **Less Wear** on motor bearings and gears; **Greater Comfort**; **More Cleanly**; **Less Complicated** and less liable to get out of order; **More Silent**. All are points of superiority possessed by the belt drive over other transmissions, and their total produces that most desirable and comprehensive quality, **Efficiency**.

SPARTAN BELTS

resemble other belts in appearance, but in actual transmission efficiency they are as different in point of superiority as pure gold is different from gold-plate. You can be sure of obtaining the genuine SPARTAN by making certain that that name is stamped on the belt. "Spartan belts" is only another name for transmission efficiency. 90% of all belt drive motorcycles use Spartan equipment.

The Graton & Knight Mfg. Co.

WORCESTER, MASS.

Branches in All Principal Cities

Canadian Distributors, CANADA CYCLE AND MOTOR COMPANY, West Toronto - Winnipeg - Vancouver

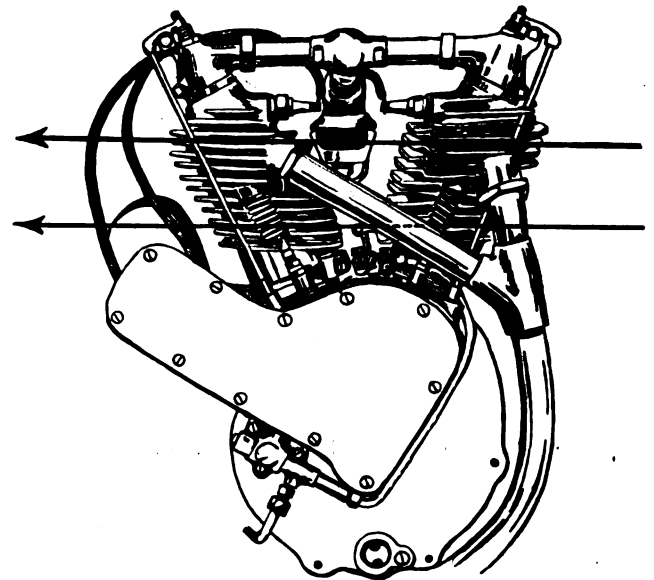


Yale Superiority, Backed by Big Yale Adve

YALE agents for 1913 have, from the start, a big advantage over their competitors, for Yale motorcycles give the buyer more real service—more value for every dollar he spends, more ability to answer every requirement—than any other machine that can be found. Men of experience and judgment, who make a careful study of all developments in motorcycle design, know that this is true, and the new people, who have previously paid no attention to the motorcycle, but are being aroused to its value by the remarkable national campaign of the Yale, quickly realize it, for superiority is so pronounced and positive that comparison with other machines, or a simple explanation by the agent, without need of confusing technical phrases, clinches the argument decisively in favor of the "Big Y."

Twin Problems

Take the Yale twin motor for instance: A motorcycle moves horizontally through the air; therefore, since the air currents are intended to carry the heat away from the cylinder walls, the logical thing is to have the cylinder flanges horizontal, in line with



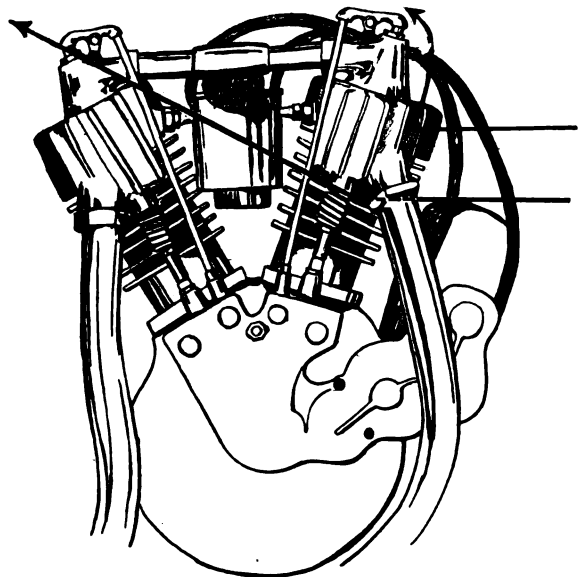
Showing how air currents pass straight through between horizontal flanges of Yale two-cylinder motor, carrying away heat from both cylinders and giving perfect cooling.

the direction of these currents. With the flanges placed thus on the Yale twin, the air sweeps freely across both cylinders, cooling them perfectly even under long, continued hard pulls when most other machines overheat and stall.

All other twins still have the flanges at right angles to the center-line of the cylinder, the same as on a single. The front cylinder cools well enough, but the air currents, deflected by the slanting surfaces of the front-cylinder flanges, shoot over the rear cylinder, leaving it in a dead air pocket



ising, Means Supremacy for Yale Agents



Showing how air currents are deflected by front cylinder flanges on other twin motors, forming a dead pocket behind, so that heat is not carried away from rear cylinder, causing it to overheat.

that lets the heat hang close and radiate very slowly. As a result, the rear cylinder of every motor, but the Yale, is always more or less overheated, eating up power and forming a constant drag on the engine.

Success Certain for Yale Agent

With such features to point out, the Yale dealer cannot fail to convince a hesitating buyer that the "Big Y" is the best invest-

ment. The facts are too plain to be missed, and a moment's comparison, even by a beginner, shows the superiority of the Yale.

And we are guaranteeing that more buyers will come to the dealer than ever before!

Our big \$125,000 national campaign eclipses in magnitude everything that has ever been attempted for the dealer's benefit. While others are holding out **promises** of "helps" for their agents, we are **acting** for ours. Results—substantial, solid results in good hard dollars—are already being reaped by hundreds of Yale agents from the start that has been made in our campaign. These results will increase steadily, for our campaign will continue without interruption, as we are going to keep right on helping make sales for Yale agents even after our entire output is contracted for.

Our entire 1913 output will soon be contracted for. After that, no more agencies will be given! We are accepting only the livest wire in each territory. Are you the man? Speak quick, for only a little time is left.

Consolidated Mfg. Co., 1730 Fernwood Ave.
TOLEDO, OHIO

THE NEW Schickel for THE NEW YEAR

¶ FOR OUR NEW YEAR'S PLEDGE WE PROMISE TO GIVE DEALERS AND EVERY MAN INTERESTED AN OPPORTUNITY TO SECURE UNPARALLELED QUALITY IN A MOTORCYCLE.

¶ NOTHING REVOLUTIONARY, BUT ONLY THE MOST DESIRABLE FEATURES—MANY EXCLUSIVE WITH THE SCHICKEL, WHICH HAVE BEEN THOROUGHLY TRIED OUT UNDER WIDELY VARYING CONDITIONS OF ROAD AND CLIMATE WILL BE FOUND IN THE CONSTRUCTION OF THE NEW SCHICKEL.

¶ TO THOSE DESIRING THE UTMOST IN COMFORT, EFFICIENCY, SILENCE, CLEANLINESS AND APPEARANCE WE INVITE YOUR ATTENTION TO

**THE 1913 SCHICKEL ANNOUNCEMENT
WHICH WILL BE MADE IN
MOTORCYCLE ILLUSTRATED, DEC. 26, 1912.**

¶ CONTRACTS FOR CONSIDERABLE TERRITORY HAVE ALREADY BEEN CLOSED, AND DEALERS APPLYING NOW WILL RECEIVE PROMPT AND IMPARTIAL CONSIDERATION.

**THE SCHICKEL MOTOR CO.
59 GARDEN STREET STAMFORD, CONN.**



*"A little old driver so nimble and quick,
I knew in a moment it must be St. Nick."*

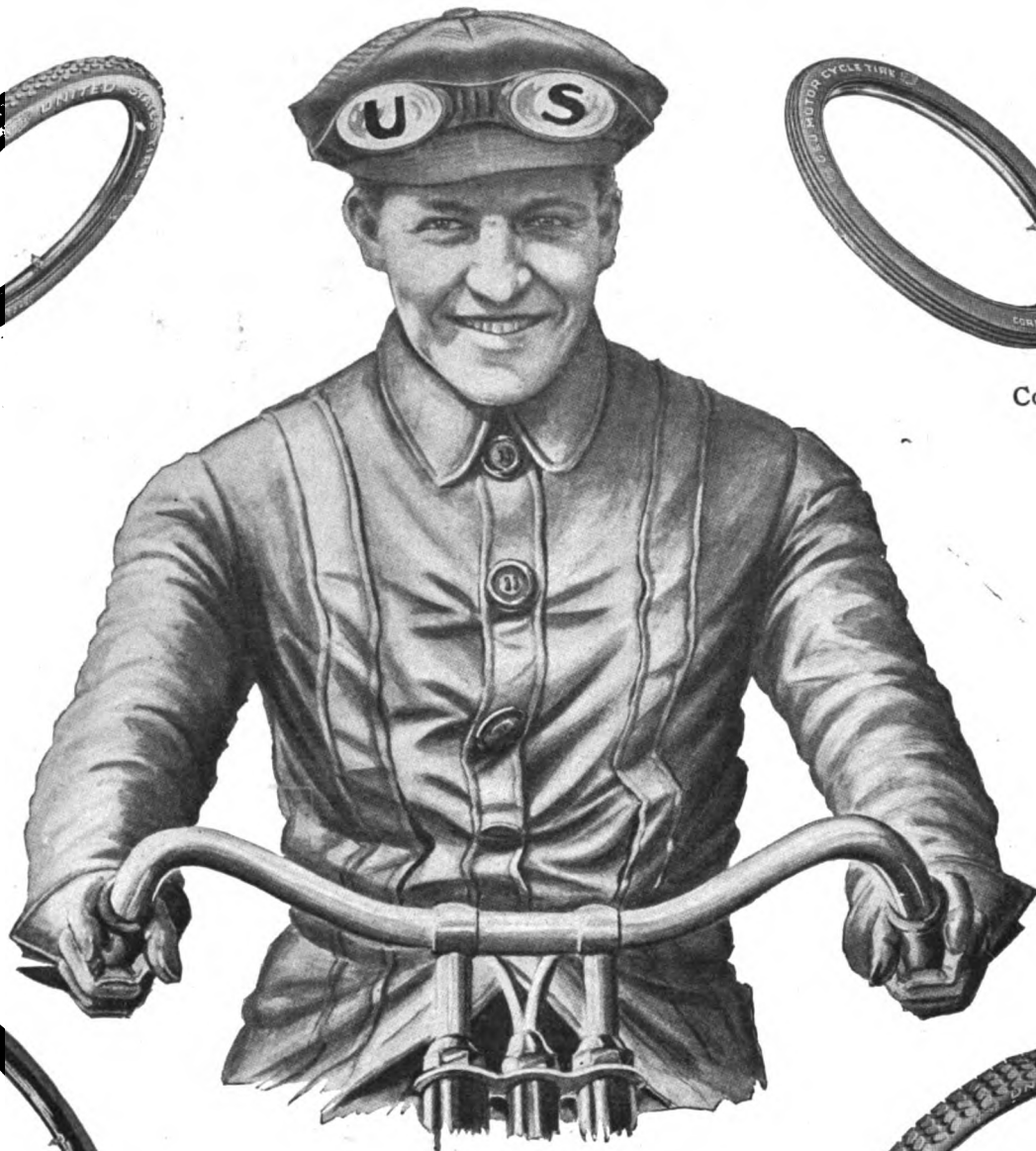
—Nursery Rhyme.



Studded
Tread



Corrugated
Tread



Chain
Tread

Studded Tread
Corrugated Tread
Chain Tread
Nobby Tread



Nobby
Tread

Simply Select the Style of Tread
that Suits your Purpose — all

United States Tires
Are GOOD Tires

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

OFFICIAL F. A. M. UNIFORMS ADOPTED

Three Grades of Material, All of Dark Olive Color, Approved By Committee—Norfolk Jacket Bearing F. A. M. Emblem in Blue and Gold Will Be Standard.

AFTER careful study of the requirements of motorcyclists, in both summer and winter riding, and consideration of various grades of material submitted by leading manufacturers of motorcycle clothing, the F. A. M. Uniform Committee has arrived at a decision and a full report has just been forwarded to President Patterson by Chairman J. Leo Sauer. Three materials have been adopted, two for summer wear and one for use in cold weather riding, but the color and style remain the same throughout, the shade being a dark olive. The specifications call for a Norfolk jacket and full-size trousers with special reinforcing. On either side of the coat collar will be the F. A. M. emblem worked in yellow silk on a blue ground.

The way has now been cleared for manufacturers to submit sample suits, and when these have been passed upon satisfactorily a certificate will be issued by the Uniform Committee authorizing the maker to advertise his suits as official F. A. M. garments. The report of the committee is in full as follows:

"In compliance with the provisions of a resolution adopted at the Columbus National Assembly of the F. A. M. and the subsequent appointment of Mr. A. B. Coffman and myself as a special committee of two to determine upon an official F. A. M. uniform, I beg to submit our official report as follows:

"It has been decided to adopt three different materials, two for summer use and one for winter wear, these materials to go into uniforms all of which shall be of the same shade, namely, a dark olive, and all of the same style. The summer uniforms will be manufactured of either a genuine Roseberry or a material known as Shelter Tent. The winter suits are to be made of Fustian, a material similar to corduroy and selected for the fact that it is not only neat in appearance, durable and warm, but also can be had at a moderate price. A choice is offered as between two summer materials for the reason that the genuine Roseberry may be more expensive than some of the members may care to buy. Those who desire a more moderate priced garment will find the Shelter Tent uniform both neat in appearance and of good wearing quality. It is also waterproof.

"Before offering F. A. M. uniforms for sale, manufacturers of the same will be required to submit a sample garment of the suit or suits they intend to manufacture as F. A. M. uniforms to the chairman of the F. A. M. Uniform Committee, Room 721, 51 Chambers street, New

York. Such sample garments must be complete in every detail, as to the official specifications. Upon their being approved by the chairman of the Uniform Committee, a certificate will be issued to each manufacturer making application and authorizing him to manufacture, advertise and sell such garments as the official F. A. M. uniform. Although it is not the intention of this organization to attempt in any way to regulate the price of these uniforms, at the same time manufacturers will be expected to submit their quotations to this committee when their samples are shown for approval.

"In order to be acceptable to the F. A. M. Uniform Committee, these suits, made of one of the above mentioned three materials, and no other material, and only of a dark olive shade, must also be of the following specifications:

"The coat is to be made Norfolk style, with the lower pockets accordeon pleated and must measure, for a size 38, at least 31 inches from the collar seam to the bottom of the coat; smaller and larger sizes to be in proportion. The pockets should be made with flaps and the collar fitted with a tab so that it can be buttoned tightly around the neck. The coat to have four strap pleats of liberal width and full length, two in front and two in back also a belt and wrist tabs. At least one breast pocket and one inside pocket for the coat are also required. All coats and trousers must be made full to size.

"The F. A. M. Emblem, in blue and gold, an accurate counterpart of the official emblem of the organization and measuring one inch square, is to be woven in silk and sewed on each side of the coat collar. A square of blue silk should be used as a background and the design of the emblem worked in gold.

"The trousers must be made at least riding length, extend well below the knee and may be either laced or buttoned. The reinforcement of the seat, which should be extra wide, is to reach all the way down on the inside seam. The trousers are to have two side pockets, two hip pockets and one watch pocket, with flaps on all except side pockets.

"A copy of this letter, which has the approval of Mr. Coffman, the other member of this committee, and which is to be considered the official report of your committee, is being forwarded by this mail to the trade journals, so that all manufacturers of motorcycle clothing may be advised at the same time as to the specifications decided upon by the committee."

MOTORCYCLE CLASSIC IS PRACTICALLY ASSURED

ALATE report from the Chicago M. C. with reference to its proposed national motorcycle road race for July 4, 1913, is to the effect that returns from the manufacturers have on the whole been highly encouraging, and the American classic is practically assured. Favorable replies have been received to letters addressed to the Miami Cycle & Mfg. Co., the Hendee Mfg. Co., the Minneapolis Motorcycle Co., the Henderson Motorcycle Co., the Waverley Mfg. Co. and the Flanders Mfg. Co. The Emblem Mfg. Co. interpreted the letter to mean that the big event would not be confined to stock machines, and

stated that it would not participate unless this was the case. The Chicago club has informed the Emblem company that only stock machines will be eligible, and in all probability the Angola firm is now on the list of those favorable to the project. The Aurora Automatic Machinery Company and Harley-Davidson Motor Company had not made known their decisions definitely at latest reports.

The V-Ray Company, manufacturer of spark plugs at Marshalltown, Iowa, is the first firm to offer a trophy, a handsome silver cup and a cash prize of \$200 being pledged.

DAYTON TWINS MAKE IMPRESSIVE DEBUT

Two Models, Rated at Seven and Nine Horsepower, Are Manufactured by Davis Sewing Machine Company, of Dayton, Ohio—Reserve Compartment in Gasoline Tank, Large Tires, Unusually Strong Frame and Improved Grip Control Among the Features.

A HIGHLY attractive new-comer in the motorcycle field is the Dayton twin, manufactured by the Davis Sewing Machine Company, of Dayton, Ohio, and offered for 1913 in two powers, 7 and 9 h. This machine combines pleasing lines with a sturdy motor, and at \$265 for the lower-

of fuel for emergency use. The oil tank has a capacity of two quarts. The front fork is of sturdy construction and embodies a vanadium steel spring of the suspension type. Shock-absorbing in the rear is cared for by the Dayton shock-absorbing spring seat-post, which is credited

guards of extra width and depth are used, so that the rider and machine receive all the protection possible without cumbersome attachments.

The Dayton frame is of extra heavy gauge tubing, reinforced with D tubing, and the wheelbase is 57 inches. The Troxel No. 1 saddle is regular equipment, with the Persons optional. Braking is by the Lester center-braking coaster, which has given a good account of itself in extended tests; the muffler, while compact, is credited with practically eliminating noise. Dayton carmine is the standard finish.

Distributing Depots.

With a view of giving its dealers satisfactory service at once the Davis company has taken pains to locate distributing agencies with reputable firms in such a way that the country is satisfactorily covered. The Beckley-Ralston Company, 157 North Michigan avenue, Chicago, will handle the Dayton machines for the Central West; J. W. Grady & Company have the distributing agency for the Daytons in New York State and New England; in Pennsylvania, New Jersey, Delaware and the District of Columbia sales will be cared for by the Haverford Cycle Company, 827 Arch street, Philadelphia, Pa.; W. H. Grover, Norfolk, Va., will act as distributor in Virginia, Maryland and North and South Carolina, and on the Pacific Coast the Dayton interests will be advanced by a factory branch, located at 628 Third street, San Francisco. It is stated that the sales outlook already is excellent.

powered model and \$275 for the 9 h. type, it promises to be a lively bidder for the new season's business.

The 7 h. motor has a bore of 3.25 and stroke of 3.67 inches, while the 9 h. model has a bore of 3.50 and stroke of 3.67. This gives the former a cubic displacement of 60.92, and the displacement of the latter is 70.62. The motor has a one-piece crankcase and cover, fitted by ground joints. This construction affords maximum rigidity and prevents oil leakage. Large annular ball bearings are used with improved retainers in steel pockets, and the connecting-rod roller bearings and connecting-rods themselves are provided with take-up nuts for adjustments.

The Lubrication System.

A double oiling system is used, comprising feed drip and force feed pump, internally contained in the tank. Transmission is by chain on both models, with free engine and clutch, with side lever control, to permit of variable speeds. The gear ratio is figured at $3\frac{1}{4}$ to 1, this representing a speed of 56 m. p. h., with the motor running at 2,500 r. p. m. It is announced that other ratios will be provided on specification. The double grip control system is used, embodying improvements which give greater positiveness and durability. The grips themselves, are so constructed as to give long service no matter how roughly handled.

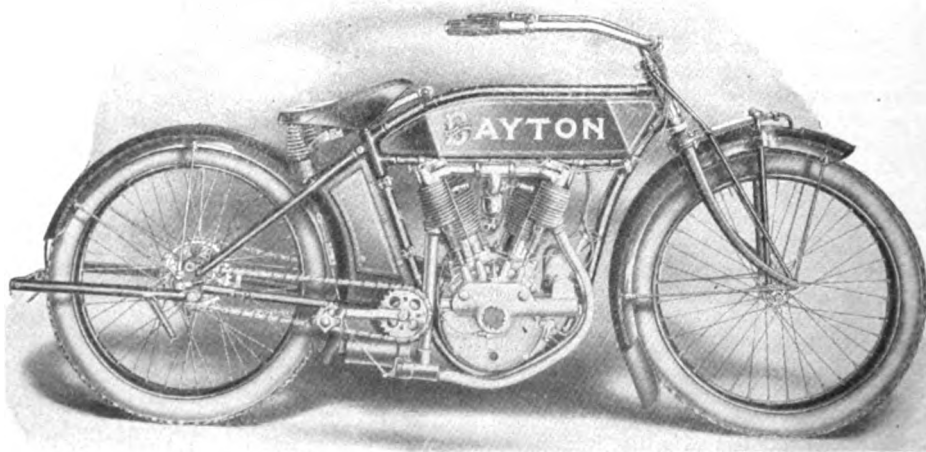
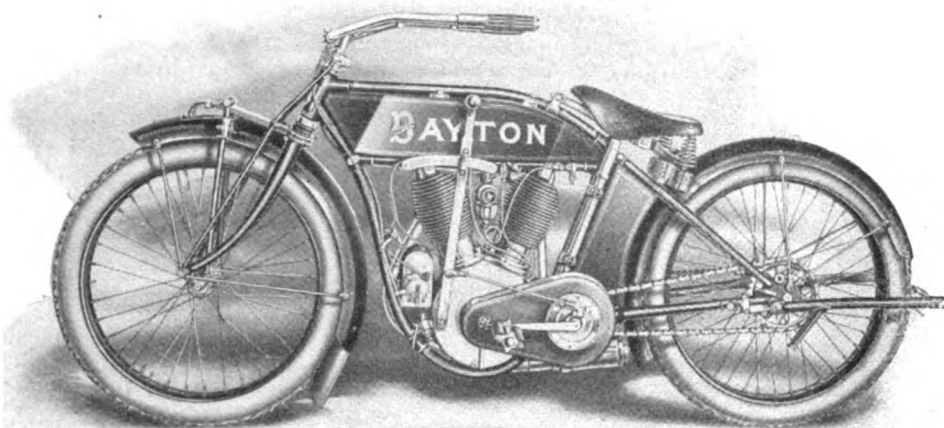
The ordinary capacity of the gasoline tank is $2\frac{1}{2}$ gallons, and there is a reserve compartment capable of holding one pint

with unusual strength while affording satisfactory resiliency.

Large Tire Equipment.

It is worthy of note that 28 by 3-inch tires will be standard equipment on the Dayton machines. United States tires will be fitted regularly, with Diamond or Goodrich tires as options. The rims are of the 28-inch C. C. type and extra heavy, being capable of taking either $2\frac{3}{4}$ or 3-inch tires to advantage. The front wheel is fitted with 36 spokes and the rear has 40. Mud-

AT a recent meeting of the motorcyclists of Burlington, Ia., the Hawkeye Motorcycle Club was formed and the following officers were elected: Francis M. Field, president; Harry Mauthe, vice-president; C. R. Hutchinson, secretary, and Joe Miller, treasurer. August Gerdes was chosen road captain, with George Gantz and Arthur Lindquist for his lieutenants.

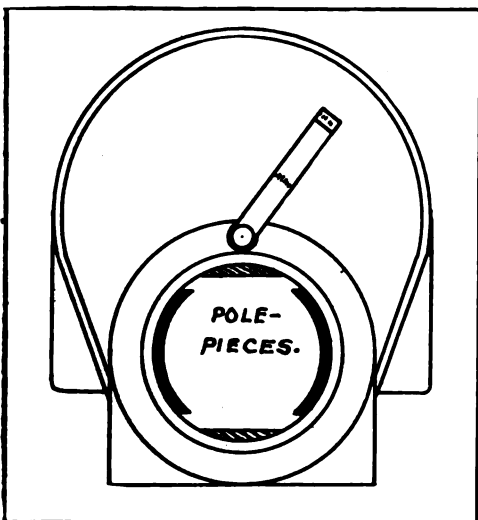


NEW HERZ MODEL

CHARACTERIZED by even greater reliability, regularity of efficient current output and extreme range of sparking speeds, the 4U1 model of the Herz or Ruthardt magneto, made by Herz & Co., 295 Lafayette street, New York, exhibits a number of changes over previous models for motorcycle ignition. Chief among these are the use of U-shaped magnets instead of those of the laminated horseshoe type, the use of pole-pieces in an improved armature tunnel and a new means of securing the condenser plates. A new terminal, wholly encased in hard rubber and thoroughly waterproof is fitted also.

New Magnet Form.

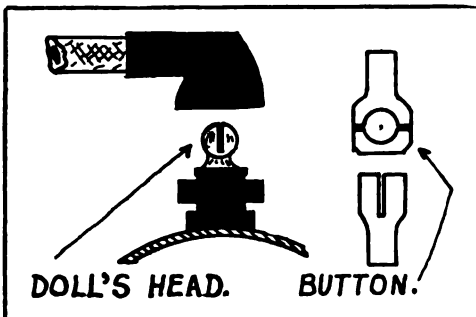
The outward appearance of the new model is but slightly different from the corresponding machine brought out in 1912. The overall height is, however, nearly one-half an inch greater and the arch slightly different in shape. Like all Ruthardt magnetos, the 4U1 model is armored by aluminum end-plates, and with the new insulated terminals is thoroughly water and dirt-proof. The magnets are double, there being two sets which are connected horizontally by a brass tie-rod, which serves as a brace and as a handle when the magnets are being magnetized. The body is rectangular, with the pole-pieces inserted at the sides, and the top and base plates are brass castings, screwed in place. The tunnel



thus formed enables any removal of the armature to be readily made by taking off the end bearing plates, so that repairs can be quickly effected should these be necessary. Ball-bearings are used to carry the armature as in previous models.

Condenser Construction.

The condenser is carried on the armature between the armature ends, electrical connection being made by a flat spring end on one of two clips, which keep the mica plates together, and through a hollow spindle which bears the whole con-



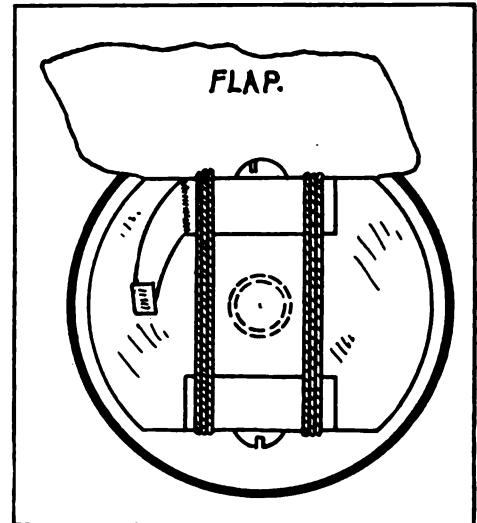
denser section. These clips are further reinforced by double wrappings of braided cord, dipped in waterproof composition. A similarly treated flap protects the end of the condenser which is exposed within the armature frame. Frilling of the condenser plates due to excessive vibration is thus eliminated thoroughly. The contact-maker casing has been made stronger and the timing-lever is of flat section, in place of the rounded one hitherto fitted. The terminals have contact sections of the glove-fastener type, the "button" being split in two planes at right angles to each other, while the "doll's head" has deep hard-rubber combined seating and knurled sections whose extension forms the shell of the carbon contact brush. Surrounding the "button" end is another hard-rubber shell, and when assembled play is impossible and the joint is proof against water or dirt. The connection can only be broken by a direct vertical pull, and this eliminates the nuisance of terminals coming off.

The magneto permits of very easy starting on retarded spark, and its weight is scarcely

three-quarters of a pound greater than that of the single-cylinder Herz model which it succeeds. Other constructional details remain unchanged since 1912.

Assembling and Testing.

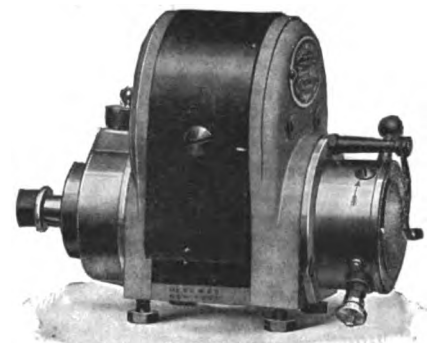
The assembling of a Herz magneto is a simple operation and well worth a visit to the factory to see. The body and end plates are in one unit, the magnets in another and the complete armature and bearing plates also. The magnets are magnetized by means of a



special electro-magnetic apparatus, and when thus charged have a bottle-section keeper placed over the ends. In the swelled portion of the keeper is put the body, which is then drawn up so that the magnets fit in place, when the keeper is withdrawn. The armature and bearing plates are fitted, and the machine taken to a running-in stand, where it is given a 48-hour run under expert observation. When satisfactory it is placed on a special testing apparatus which incorporates a spark-plug in a chamber under any desired compression. On this apparatus it is run to determine the maximum efficient speed and also the minimum speed, which is indicated on a tachometer. The minimum speeds vary from 66 to 75 revolutions per minute, while as high as 3,800 revolutions are frequently obtained, the plug being under regular motor compression pressure.

PULS WAS CLUB VISITOR.

GEORGE PULS, of the Harley-Davidson staff, was the guest of the Ft. Wayne (Ind.) M. C. at a recent meeting. After fifteen new applications for membership had been recorded Puls addressed the club and advanced the opinion that it is one of the liveliest in the F. A. M.



The 1913 Herz Magneto.

FIVE NEW MAJESTIC MODELS FOR 1913

Worcester Company Will Continue to Produce 1912 Type of Sidecar, and Will Add Four Attractive Passenger Attachments of Latest Designs and a Sturdy Parcel Delivery Car—A "Canoe" Body Along Popular English Lines is on the List

DURING the season of 1912 the Majestic Manufacturing Co., of Worcester, Mass., produced only one model of sidecar, but the wide favor with which it was received, and the rapid advance of sidecars in popularity have made it evident that a broader choice in designs will be desirable for next season. Keeping in touch with riders throughout the country, the Majestic company has collected a mass of valuable information in regard to sidecars, and this has been embodied in the models offered for 1913.

For the coming year the Majestic company will not only continue to produce the model of 1912, but will introduce four new passenger sidecar models, as well as a parcel delivery car. The latter has been already announced, and is now familiar to the public.

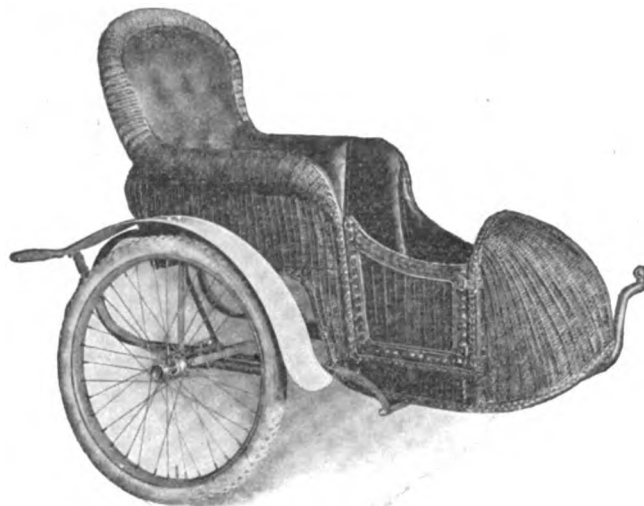
New Models in Two Grades.

The new models will be produced in two grades. The first of these will be the De Luxe cars, of which there will be two models, both having high front and sides, with side doors, and high luxurious back, making a very handsome and up-to-date vehicle. One of these models will have a wide curved front, while the other has the graceful canoe front, which has found so much favor abroad. The chassis of the De Luxe car has a double frame, easily adjustable to any motorcycle on the market, and of unusually substantial construction. These two models are heavily upholstered in dark colors, and the outfit includes a waterproof storm apron and a thick floor mat. These two models list at \$90.

A Child's Seat Attachment.

The lower priced models, listing at \$65, which are first-class, substantial cars and built of the best material, will consist, first, of the 1912 "Standard" model, which is already so well known. The fourth model will be the "Standard Canoe," which, as its name indicates, has the popular canoe front,

but with low sides, and without side doors. These two models are mounted on a chassis of the same design as that for 1912, but built of seamless steel tubing of much heavier gage than has been used heretofore, and strengthened in many particulars. The fifth model is similar to the 1912 Standard, but with a longer body, in the forward end of which is fitted a detachable child's seat.



De Luxe Model with Canoe Front.

This model was frequently asked for during the past year and will fill a wide demand; it lists at \$75.

Other Majestic Improvements.

All the above models will be mounted on especially long and flexible "C" springs of vanadium steel, which have been fairly tested in comparison with the best foreign made springs, and show that they are much superior in flexibility and durability. New hubs will be used on all Majestic models, in which the ball cups will form an integral part of the hub. Another feature of interest is that the attachments of the new Majestic line will all be made of steel forg-

ings, in place of the usual malleable iron fittings. This insures unusual strength.

The designers of the Majestic car have given particular attention to the various new methods of construction which have been produced abroad of late, but practical experience with American road conditions has shown it to be undesirable to adopt complications of springwheels, castor wheels, or other devices of the kind, as these all introduce additional small parts which necessarily result in weakness, and are undesirable for the hard service required of sidecars in this country.

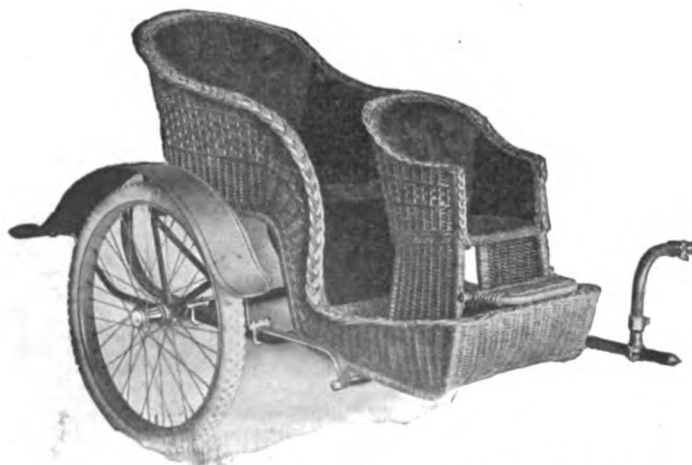
Rapidly Growing Demand.

The new parcel car is meeting with remarkable favor, and already there has grown up a large demand for this model among merchants who have quantities of small articles requiring prompt delivery.

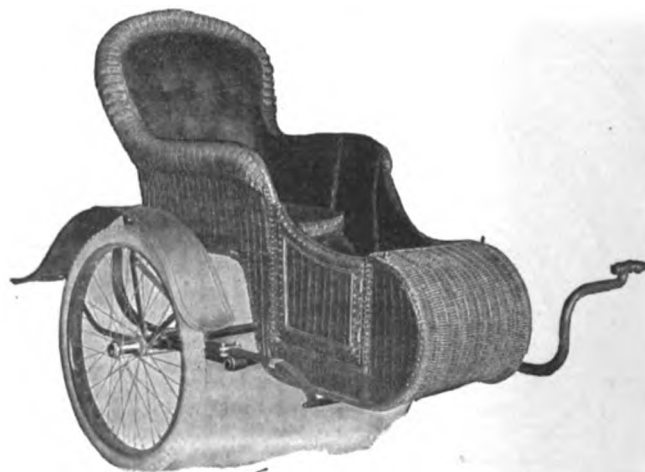
Riders of motorcycles are fast learning that the use of the sidecar is by no means confined to city boulevards and state roads, but that they can be used on any kind of a road where a motorcycle can be driven, and frequently on sandy and rutty roads where it would be difficult to use a motorcycle without the steadying assistance of the sidecar. The season of 1913 promises to be a notable one for sidecars, and the sidecar will undoubtedly, in turn, attract favorable attention to the motorcycle.

TWO BUSY AGENTS.

THE Heinz Motor Company, which recently succeeded the Chase Motor Company in handling the Harley-Davidson interests in Baltimore, Md., is in charge of two thoroughly capable men, both of whom have broad knowledge of the motorcycle field. Bert Heinz is the general manager and salesman, while his brother Gus handles the mechanical end of the business. The latter was for some time associated with Howard French, Indian agent in Baltimore.



The Majestic Trinity Model; Note Detachable Child's Seat.



Curved Front De Luxe Type, Another New Model.

CLUB IS GOING HIGHER

National Capital Motorcyclists Seek Supreme Court Aid in Their Action for Tandem Permit.

WASHINGTON, D. C.—After several conferences between a special committee representing the National Capital M. C. and the police officials of this city relative to the rescinding of an order issued some time ago which placed a ban on the carrying of a passenger on a motorcycle, the committee has refused a concession offered by the police and instructed its attorneys to continue proceedings. The police department, after examining a standard tandem attachment, issued a permit,

good for six months only, allowing the use of the tandem attachment, but only with a male passenger. The club had asked permission to carry either a male or female passenger on any safe form of attachment the owner of the machine might prefer.

When the police decision was made known the club expressed its dissatisfaction and instructed its attorneys, Higgins, McNeill and Evans, to apply to the Supreme Court of the District of Columbia for a writ of mandamus, requiring the Commissioners of the District to show cause why a permit for tandem riding should not be issued. The club has received an offer of assistance from the F. A. M. Legal Action Committee, through its chairman, J. Leo Sauer.

RACE FOR NOVEL WAGER.

IT is quite probable that the Elwood M. C., of Elwood, Ind., will have its light bill for the winter months paid by one of its members. M. Humphry and W. Runyan, two star riders of the club, recently made a wager, the terms of which required the loser in a race to Logansport and back to pay for the light used during the winter months at the club rooms. Runyan finished the trip in two hours and 50 minutes, while Humphry's time was two hours and 55 minutes. As Humphry claims he was delayed on the road by a policeman, Runyan has agreed to ride another race, which will decide who has to foot the bill. The next contest will be to Indianapolis and return, a distance of 90 miles.

NEW CLUBS.

LATE club affiliations reported by Secretary Gibson are as follows: The Manhattan M. C., of Manhattan, Kan., and the Brazil M. C., of Brazil, Ind. The re-affiliation of the West Side M. C., which was formerly located at Maricopa, Cal., and which now has its headquarters at Taft, Cal., is also reported.

CONTINUING SUNDAY RUNS.

ALTHOUGH most motorcycle clubs are now turning their attention to pool tournaments and other indoor pastimes, the members of the Salt Lake City M. C. are still holding to their Sunday runs. The run of December 1 to Pleasant Green was featured by a large number of sidecar passengers, most of whom were ladies. On December 8 the boys rode to Lake Point.

F. A. M. COMMISSIONERS.

THEODORE SIDDALL, of Manila, has been appointed commissioner for the Philippine Islands. Other new State commissioner appointments made by President Patterson are those of S. M. Saunders, of 727 Common street, New Orleans, for Louisiana, and C. J. Ritchie, 608 "L" street, Hoquiam, for Washington.

CHARLES H. WESTCOTT, of 38 Keene street, Providence, has been appointed as State secretary for Rhode Island.

A RECENT affiliation is that of the Queen City M. C., of Springfield, Mo., of which T. McCarthy is secretary.

THE Montana F. A. M. State Commissioner has appointed W. H. Eilers as local commissioner for Helena.

TORONTO DUES INCREASED.

TORONTO, Ont.—At a recent meeting of the Toronto M. C. a motion was carried by which the club fees were raised from two to four dollars per annum. This was not done without some lively discussion, as the members felt that they were not getting full value from their membership. It was pointed out that there were numerous advantages to be gained, such as affiliation with the Canadian Motorcyclists' Association, with its ever growing benefits, social privileges and a general feeling of comradeship possible only through association with a live motorcycle club. A report was handed in by one of the executives showing how it would be possible for the club to have well furnished clubrooms, such an arrangement being possible only with the increased fee. When this was brought forward the boys felt that the change would be for the general benefit of the club and the motion was carried.

HANDLING RETAIL SALES.

ANNOUNCEMENT is made that the Reading Standard Sales Company, of Chicago, has taken over the retail sales department of the Angsten-Koch Company, and that as a result the quarters of the former firm will be considerably enlarged. In addition to handling the sales for Cook County the company will cover 16 other counties in Illinois and Indiana, the territory in all being more than 8,500 square miles. The Reading Standard Sales Company disposed of six twin machines during the first ten days after closing its deal with the Angsten-Koch Company, thereby indicating that it is awake to its opportunities.

HILL-CLIMBING PROGRAM

Toronto M. C. Stages Highly Successful Events in Four Classes Including Trials for Sidecars.

TORONTO, Ont.—Four classes were arranged for contestants in the annual hill-climbing program of the Toronto M. C., held November 23. The events were staged on Bathurst street hill, about a mile and a half from the heart of the city. The hill, one of many quite precipitous ones in the vicinity, is admirably suited for motorcycle contests. The surface is none too smooth and owners of high-powered machines found plenty of opportunities for skillful jockeying on the way up. The course was 960 feet long and the average grade was 1 in 6. The riders started from a standstill. This gave them about 50 yards to travel before striking the hill proper.

A CALIFORNIA TRIP

Lindsay Motorcyclist Covered 301 Miles in Less Than Eleven Hours on the Road with Mercury at 100 in the Shade.

W. C. YEAGLEY, of Lindsay, Cal., recently made an interesting tour by motorcycle from Marysville through Sacramento, Stockton, Modesto, Merced, Madera, Fresno and smaller places, his cyclometer showing that he had traveled no less than 301 miles when he decided to put up the first night at Selma. Yeagley had spent exactly 10¾ hours in the saddle. From Sacramento to Stockton the tourist rode over an ideal road, but from Modesto southward he encountered exceptionally hard going. In some places the road had been almost obliterated through the operations of the gangs at work on the State Highway, which is now being constructed. Yeagley's detours to avoid the stretches which were torn up added considerably to his mileage.

To make matters worse, the temperature ranged from 100 to 110 in the shade for about six hours, and it may be taken for granted that the heat was much more oppressive on the open road. Yeagley experienced considerable trouble with sand toward the end of his tour, but managed to pull through on schedule time.

TORONTOANS ON THE ROAD.

TORONTO, Ont.—Every Sunday morning while the fine weather holds a number of Toronto boys may be seen chugging out Dundas road toward Cooksville, about 18 miles from the city. Here a general conference is held, or perhaps there is a run down to the lake front at Port Credit. A turn to the north takes the riders to Brampton, a beautiful little town on the C. P. R., where a number of Toronto people have their homes.

PIERCE REPRESENTATIVES.

DESPITE recent set-backs owing to financial difficulties, the 1913 prospects of the Pierce Cycle Company are very bright, according to a statement from Sales Manager W. A. Johnson. Mr. Johnson has just completed an extensive trip throughout the West and is now traveling eastward. He says the number of orders received was beyond all expectations. He took orders from jobbers for goods to be carried in stock, in amounts varying from \$5,000 to \$20,000.

The machines were classed as follows: 4 h. belt drive, 4 h. chain drive, 7 h. belt or chain drive and 7 h. with sidecar. In the first event the British machines with their small wheels showed well, Newport, on a Triumph, being the winner. In the 4 h. belt drive class Shuttleworth was first on a P. E. M.

Sensational work by the twins featured the meeting. They romped up the difficult grade without perceptible loss of speed; Herb Kipp scored the fastest time. The lightweight machines also gave excellent accounts of themselves. Two Douglas mounts and one N. S. U. negotiated the hill successfully, going up on high speed and without faltering. Bert Webb with Indian 7 and sidecar won out in this class, his time being 26½ seconds. Later one of the boys took the hill with two passengers and not satisfied with this he added still another passenger and reached the top with little difficulty.

NEW JEFFERSON TWIN A STURDY MOUNT

After Exhaustive Road Tests Waverley Manufacturing Company Announces a Speedy Two-Cylinder Model Which Embodies Unique Spring Construction and Distinctive Silencer Among Other Features.

FOR the last year people living in and near Jefferson, Wis., have had their attention repeatedly called to a sturdy young man and a capable-looking motorcycle that dashed to and fro over all kinds of roads and without the slightest regard for weather conditions, and now the curiosity aroused by the rider and his mount is to be satisfied. The young man is a tester and his mount is the latest product of the Waverley Mfg. Co., the 7 h. Jefferson twin. This brief announcement may meet the requirements of folk in general in and about Jefferson, but motorcyclists will hanker for details, and accordingly the company has made a formal statement.

When the decision was arrived at to produce the new twin, steps were taken to give it the most severe tests on the road, and every part was subjected to unusually rough handling before it was deemed worthy of a permanent place in the mount. It is stated that the machine has developed no faults in all its strenuous work, and the company looks for big things from it.

Distinctive Springing.

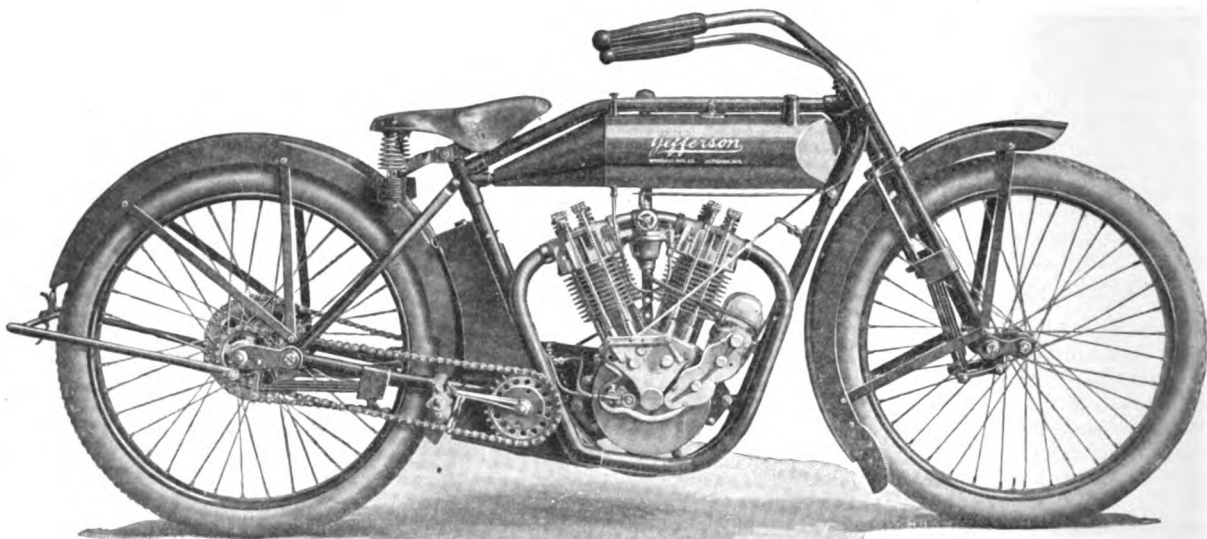
The new machine is equipped with ingenious cradle springing in the rear, and with a radical leaf-spring device in the front fork. The springs have been tried out under most exacting conditions, and both front and rear constructions have met all the expectations of the designers. They announce that the system has been found to combine strength and resiliency to a most satisfactory degree.

The motor is the Waverley, well known through its excellent work during the past summer. This power plant, fitted in what was then known as the P. E. M. machine, pulled 37 firsts and 10 seconds out of 47 races in which it was entered, the victory being scored in each case by a single-cylinder machine. It follows, argue the designers, that when the new twin is in racing trim it is bound to be heard from satisfactorily.

High Power and Low Weight.

The Waverley motor is equipped with the popular large-port, mechanically-operated overhead valves, with high-compression chamber, so that the highest possible speed is afforded without unduly weighting the machine. In other words, there is a combination of high speed and low weight. The Jefferson makes an excellent appearance on the road and is credited with being as comfortable and sturdy as it is attractive in exterior make-up.

It will be noted that the muffler construction on the new Jefferson follows unusual lines; the silencer is concealed and while comparatively small it is said to be remarkably efficient. The Waverley company is now putting out an advance circular which will tell dealers



enough about the new machine to hold their interest, and this literature will be forwarded promptly on request. As the most interesting product of a plant that has already earned considerable road and track prestige the new Jefferson twin is certain to come in for its share of attention among 1913 models.

THE HAWTHORNE LINE.

ADVANCE proof sheets showing the lamp line of the Hawthorne Mfg. Co., of Bridgeport, Conn., for 1913, are now being distributed and dealers and riders will find much to interest them in the descriptions and illustrations of improved models. The usual attractive Old Sol line is shown and one of the features of special interest is a sidecar lamp, which combines a powerful light with minimum consumption. This lamp generates 100 candlepower. It may be attached to the sidecar with a finger iron or to the motorcycle itself with a regular bracket. Unusual interest attaches to the company's line of up-to-date tail lamps, particularly in view of the fact that all large cities are now demanding rear lights on motorcycles as well as on motor cars.

THE YALE OUTPUT.

TOLEDO, O., November 22.—Manufacturing facilities at the Yale factory are being greatly increased to take care of the record amount of business that is pouring in. Orders accompanied by cash deposits are already on hand in numbers equal to 137 per cent. of the total number of machines sold in 1912. More than twice the number of machines built in 1912 are planned for next year, but the business outlook makes it certain that all of these will be sold long in advance. At the rate orders are being received now, the entire output for 1913 will be sold by the end of New York's show week.

JOHN SYKES, JR., the Indian agent at Trenton, has 28 orders for 1913 twin Indians.

U. S. TIRE EXTENSIONS

Plans for Next Year Call for Sixteen New Factory Buildings, Ranging from 2,000 to 130,000 Square Feet.

THE greatest daily output ever considered possible in tire manufacture is provided for in next year's plans of the United States Tire Company, which have just been made public. This concern, which operates four great plants, plans an expenditure of over \$3,000,000 in factory improvements and extensions.

First of all, the Morgan & Wright plant, which is located in Detroit, is to be doubled in both area and production. Ground has been broken for several new buildings and work will be rushed forward as rapidly as possible. An idea of the extent to which this factory will be increased may be gained from the fact that whereas its employees now number 2,500, 6,000 workmen will be required when all the improvements are finished. The output of the factory will be in excess of 5,000 tires daily. It is planned to erect sixteen new factory buildings, ranging in size from 2,000 square feet to 131,000 square feet.

In addition to its big Detroit factory, the United States Tire Company operates extensive rubber works in Indianapolis, Hartford and Providence, and it is the intention to increase the facilities of all these plants. At Indianapolis a building 80 x 170 feet and six stories high is being erected. At Providence, another structure 75 x 300 feet and three stories high will be added, while at Hartford a fine new powerhouse and power plant have been installed at a cost of more than \$175,000.

DROWN WITH STEEL CONCERN.

J. W. DROWN, formerly advertising manager of the Standard Roller Bearing Company, Philadelphia, Pa., has resigned and accepted a position as sales manager of the Pressed Steel Manufacturing Company, 504 Land Title building, that city.

The R-S for 1913

Three Reading-Standard Models for Coming Season Show Motor Improvements, Ingenious Cam Construction, Re-Designed Clutch, Greater Fuel Capacity, More Efficient Braking and Increased Standardization of Parts. —Lower Prices Listed.

ALL the efforts of the Reading-Standard designers and factory staff are being concentrated upon the production of three highly attractive motorcycle types for 1913, this company having disposed of its bicycle interests in order that its plant might be devoted exclusively to motor-driven two-wheelers. Revised prices for 1913 share interest with improved motors and a number of other important changes and refinements. The new 7-8 h. twin, chain-driven, will list at \$275; the 5 h. single-cylinder Tourist model, with either chain or belt, at \$225, and the 4 h. single-cylinder service model, with belt drive, lists at \$200.

The Improved Motors.

The improved Reading-Standard motor for 1913 is a triumph of engineering and manufacturing skill. It is distinguished by unusual reserve power, rapid acceleration and plenty of speed. Simplicity, durability and economy, widely recognized as attributes of the R-S motors of 1912, are none the less marked in the new product, and in addition vibration and wear are further offset and efficiency is brought to the maximum. The most radical change in the new R-S motor is found in the single-cylinder Tourist model, which is a practically new power plant. It follows the lines of the sturdy twin motor, which has given exceptional results.

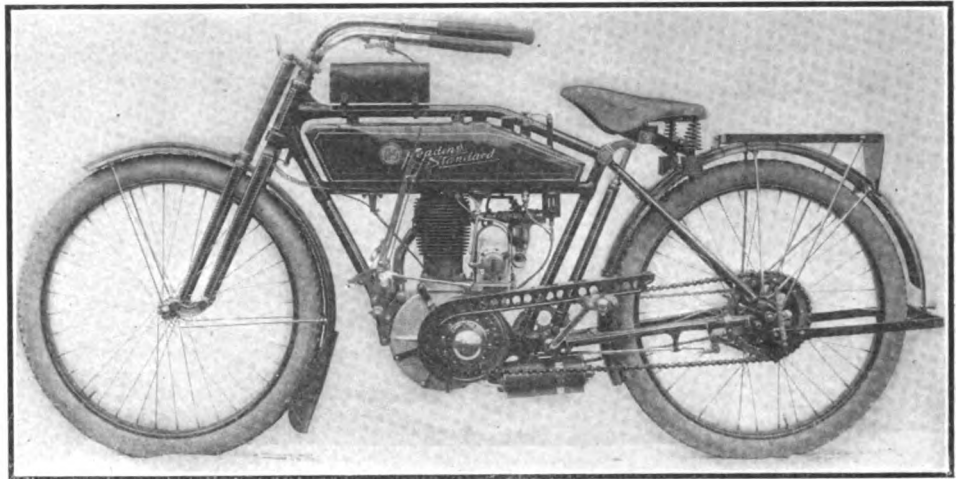
Cam Refinements.

The valve gearing is the same throughout the Reading models, and an interesting and valuable factor is the making of the intake and exhaust cams and the operating gear

wheel, of a single piece of vanadium steel. The gear wheel forms the basis of the unit, and a liberal-sized and substantial cam is milled on either side of it in the proper position. This prevents any shifting of cams

More Motor Details.

The valve lift rods, of vanadium steel, are screwed into the base and are provided with felt washers which absorb oil, prevent leakage and also act as lubricators of the lift rods.



5 h. R-S. Single. Note Chain Guard and Racy Lines.

or errors in assembling, which may occur when cams are pinned to the shafts. The cams are both undercut around the centers, providing unusually long and substantial shafts and bearings, without increasing the depth of the gearcase. Single lift levers transmit the movement from the cams to the valve lift rods thus effecting additional simplification of the mechanism.

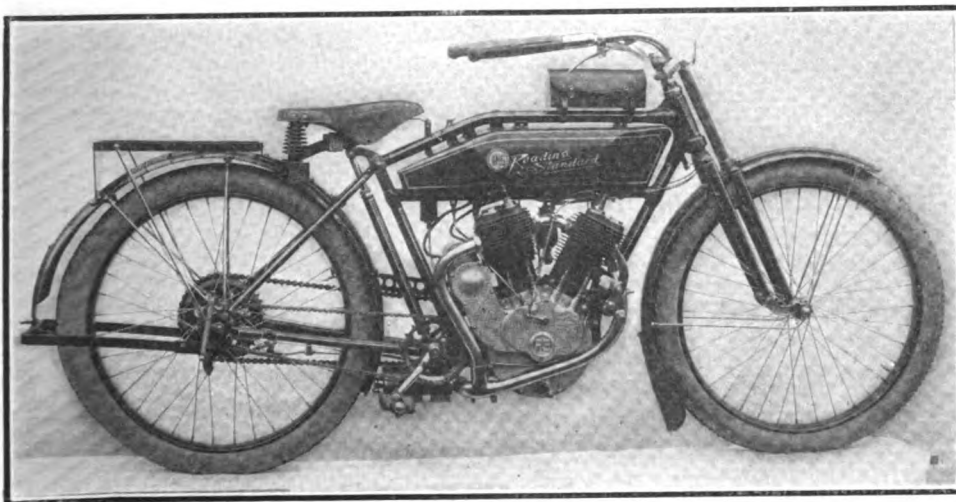
The re-designing of the compression space in the cylinder and valve pockets, on entirely new lines, will give an unusually good clearance of burnt gases, thus obviating any tendency to overheat and assisting in obtaining a better charge of gas for the next explosion.

The crankcase compression release, formerly located on the rear of the cam case, directly under the magneto, has been changed by relieving the compression through a boss. This is cast integral with the rear half base and is provided with a specially designed ball chuck to prevent loss of oil.

The Re-Designed Clutch.

The new Reading-Standard models will be equipped with a cone type clutch, the same as that fitted on the 1912 twin, but with the addition of cork inserts. This arrangement insures a perfect grip and smoother engagement, and adds materially to the efficiency of the fitment. Two-point ball bearings have been substituted for the radial bearings previously used, these caring for end thrust in a more efficient manner and permitting of easy adjustment to take up wear. This improved clutch is of the same general construction as the automobile type which has stood the test of years of hard service. Its most prominent features are simplicity, durability and ease of control.

(Concluded on page 56.)



Valve Side of R-S. Twin. Observe New Position of Tool-Box.

WHY I GAVE THANKS

BY J. MCKURKIN

Interesting Sidelights on a Tour, a Tumble and a Turkey That Enlivened Thanksgiving Day for a Motorcyclist Who Refused to Be Forgotten.—A Baffling Puncture and the Good Samaritan Who Arrived in the Nick of Time.

ONLY a day or two prior to our festival of thanksgiving that has just gone into the chronological discard, my folks—father, mother and younger brother—received one of those short-notice invitations from relatives in a town forty-five miles distant to assist in the demolition of a turkey, and almost before I knew what was happening I was slated for a lonesome holiday. It was agreed that I would not be able to shake off business shackles in time to join the others on the trip, and my father, calm philosopher that he is, decided that my wisest course would be to remain in M——, and eat my Thanksgiving dinner in a restaurant. This may have seemed like a reasonable decision under the circumstances, but it did not take into consideration my love of a sporting chance, and it left entirely out of the reckoning my trusty and battle-scarred motorcycle! Thereon hangs the tale I am about to pass along to the brethren.

Holidays in general are tolerable, but just let one begin to develop symptoms of lonesomeness and it becomes at once as forlorn a period of time as ever begrouched a calendar; with this in mind I was determined to dodge that solitary dinner, but I refrained from exciting the folks by taking them into confidence. Early in the afternoon of the day before Thanksgiving they went off to the train in high feather, and I went to the office—in low feather, if there is any such type of temperamental plumage.

Beginning to See Light.

Up to this time I had given my motorcycle only a passing thought in connection with the situation, but as I gloomed at my desk it began to dawn on me that the single-tracker might save the day. The machine, a two-speeded single, had been placed in storage (my opportunities for riding of late had been few), but I knew it was in excellent running condition, and felt that I could depend upon it in any kind of a harem-scarem adventure that might develop. By leaving home at a fairly early hour on the morning of Thanksgiving Day I should have no difficulty in arriving before noon at the scene of the prospective feast, provided I did not lose the road or have a mishap, and as I have already intimated, I was willing to take a chance. I was too wise to place any dependence in the erratic holiday train schedule out of my home town (although a map of northern New Jersey really does show our town), and being unable to leave the afternoon or evening before, my plans simmered down to the motorcycle—or nothing. It required just nine seconds by the office clock for me to decide in favor of the motorcycle.

When I rolled out of the covers shortly after 8 o'clock on the morning of the holiday snow was falling—sulkily, and a bit timidly—

but still falling. (The weather conditions will no doubt be recalled clearly enough by the boys throughout the east-central districts who had arranged a road trip for the day, so I need not dwell upon them.) For a moment my plans tottered, but I decided that the first snow of the season could not amount to much, and was soon stowing away a hearty breakfast. Half an hour later I was trundling



"I had departing visions of the turkey."

my machine out of the garage and making road inquiries.

Three Miles on Wrong Road.

A hasty examination showed my tool kit to be in fair shape, but my tire repair outfit was practically bankrupt. I hesitated, with an idea of laying in some patches and cement, but finally decided to waste no more time. After all, the trip would be only a jaunt of 45 miles; under the conditions the rider who would worry about cement would be little better than a mollicoddle. At least that's the thought I consoled myself with as I swung into the saddle. It was slow going for a time, the roads being quite soft in spots as

a result of the snowfall, and on more than one occasion I had picked out an inviting looking puddle for a flop when I managed to wriggle out of a skid and remain upright.

I had traveled about 10 miles from M——, and was purring along a fair stretch of country road when I encountered a milkman, evidently homeward bound from his morning trip into a nearby town. Being at peace with the world and quite pleased with myself I called out a greeting to him.

"Am I headed O. K. for W——e?" I queried, just by way of being sociable.

"Almost," replied the knight of the milk cans, as he pulled his horse to the side of the road. "You lost your way only 'bout three miles back, and it ain't so very hard to get on the right road again. I'll show you a side road that'll save you time; it's in good shape, too."

I spent half an hour in traveling two miles on that time-saving road, and considered myself lucky to get through with my machine intact, but it did finally bring me out on the main route.

Making Up Lost Time.

Suddenly it struck me that I was falling behind my schedule, and I started to make up some lost time. For 20 miles I romped through the snow-mottled countryside in high spirits; then came some stretches of sand and finally a hill with a ragged surface. About halfway up I felt my rear wheel bump, and with my spirits going down ten notches at a flop I slid out of the saddle and jacked my machine up on the stand. I could not find a new puncture, but there was no denying that my rear tire was shy of air. Off came the casing, and I began an anxious inspection of three old patches. One of them was in bad shape, and I finally detected the leak.

I figured that by careful doctoring I would be able to make that patch hold air, but I was mistaken. A search of my kit revealed two new patches, but both were too small to replace the old one satisfactorily. I pumped a bit, scratched my head another bit and then pumped again. I coaxed about two slim drops of cement out of a battered tube, and then squeezed the patch into position until my fingers ached. I waited patiently for the cement to "set" and then took to pumping again. As soon as the weight of the machine was let down on the rear tire the casing flattened with surprising rapidity. I do not believe I could have ridden three hundred yards on it without danger of bumping the rim. How it managed to hold out for the first 30 miles or so is still a mystery.

Departing Visions of a Turkey.

While the day was not cold, neither was it oppressively warm, but I soon managed to

work up perspiration, partly through exercise but chiefly because my visions of an old-fashioned turkey dinner were fading with every second that passed. And that wasn't all; there were strong indications that I would not be able even to enjoy a restaurant meal. I thought of all the weird tire wrinkles related by my friends at the club; of wads of chewing-gum that formed emergency patches, and even of tire repairs made with postage stamps, but I am not a gum enthusiast and I never carry stamps. I estimated that I was four miles from the nearest town—and that I was likely to stay there.

With sickening monotony something in my mental machinery continued to click off the most enticing items of a Thanksgiving menu: turkey, cranberry sauce, and mince pie—turkey, cranberry sauce and mince pie—turk—

Suddenly another sound broke in and smothered my sub-conscious reiteration of the menu, a sound that startled me at first and then brought joy to my heart; it was the put-put of a motor, a motorcycle motor! I held my breath until I was certain that the machine was headed in my direction and then turned loose a full-grown whoop. Half a minute later a rider came over the brow of the hill, and his brakes whined as he pulled up beside me on the down grade.

Strange to say, this motorcycle Samaritan was no youthful plugger of winter roads, but a sedate and whiskered chap who smiled consolingly as he heard my story. Without undue fussing he dug into his kit and brought out patches and cement, and in little or no time we had a new patch on my tube. He insisted upon taking a turn at my pump, and finally passed a cigar to me with his card. He proved to be a collector for a leading insurance company, and a lover of the outdoors who looked upon all hapless roadsters as his brothers. He was one of the strongest arguments for the motorcycle I have ever encountered; the mere knowledge that such a man could be vitally and enthusiastically interested in the motor two-wheeler would have made a convert of any open-minded person who met him. Wherever he may be he is a

powerful force for the upbuilding of the sport.

A hearty handclasp and I was on my way again. At a quarter to twelve I was still about six miles from my destination and not very sure of the road. My tire gave me no further trouble and I was kicking the miles behind me and taking chances with the route when I developed an annoying thirst—for water, brethren, simply water. At the first farmhouse I stopped. They gave me water and also offered milk. My thirst quenched, I pushed my machine out into the road and prepared for a running mount. Just as I swung into the saddle a well-meaning pup ran out of the yard, barked and capered beside my front wheel for a few feet and then upset me. It was more a skid than a genuine spill, but I went down ignominiously. There was no damage, except to my feelings, and I interceded for the pup who was about to have better manners kicked into his carcass by the apologetic owner of the house. After all, it was a holiday and I was headed for an old-fashioned turkey dinner, so I refused to hold that spill against the exuberant pup.

Just in Time for Dinner.

About twenty-five minutes later I pulled up before the home of my relatives, and of all the party that greeted me my own folks were probably most surprised. They were just about ready to begin operations on the turkey, and after putting my machine under a wagon-shed and taking a hurried wash I was prepared to do my part. It is superfluous to state that I did it nobly. I cannot recall another occasion on which my appetite appeared to be so thoroughly awake to its opportunities. After the dinner came a good cigar and my story of the trip in detail. Then I settled back and gave thanks; first, for having a motorcycle; secondly for having the nerve to take a sporting chance with it, and lastly for having met a true knight of the road who enabled me to reach that elusive turkey with colors flying. There's something to a holiday, after all, but a fellow can't get along without the proper spirit and a motorcycle will help him find it.

agreed that the outing was one of the most successful they had ever known. The accompanying photograph, forwarded by H. Conboy, was taken at the gate leading to Kawana Springs.



C. E. KIMBLE, of the Chattanooga Brazing & Welding Co., on his single Indian.

NO LACK OF GAMENESS

Miss "Cy" Woodman, Again Halted by a Fall, Asserts She Will Finish Trip to San Francisco.

WHILE her progress across the country has been comparatively slow, Miss "Cy" Woodman, who left New York City in August for a trip to the Pacific Coast, has at least established a reputation for gameness. When last heard from the girl writer and lecturer was laid up in Des Moines, Ia., as the result of a fall from her machine at the bottom of a long hill. The accident left her with one eye closed and with several ribs injured. This was the latest of no less than a dozen spills in which Miss Woodman had figured since leaving New York; on several occasions she has been compelled to halt for a week in order to recover from injuries. Most of her serious falls have resulted from a desire to hit up too lively a pace over bad roads.

Despite the fact that she has some of the worst going of the trip still ahead of her the girl rider asserts that she will reach San Francisco before the first of the year, and have time to spare. She is mounting a Flanders 4 which has given a good account of itself throughout the long grind.

TRENTON OFFICER ACTIVE.

A MOTORCYCLE officer in Trenton, N. J., made twelve arrests in one week, and fines were imposed amounting to \$125. From \$10 to \$25 is charged for the first offense and a fine of \$100 is the penalty for the second speeding offense in the New Jersey capital.

BIG SAVING IN TIME.

A MOTORCYCLE has been the means of enabling H. G. Ellis, a rural mail carrier of Greenfield, O., to reduce the time required on his route from seven hours to less than two hours.

MOTORCYCLES have recently been installed in the Post Office Department at Memphis, Tenn., for the use of the special delivery boys.

ATWOOD, Kan., November 30.—Edward L. Garver, riding a single-cylinder Yale, took first place in every event at the race meet here today.



AN OAKLAND OUTING

Members of Active California Club Enjoy Run to Kawana Springs Where Santa Rosa Riders Are Met.

ONE of the recent outings of the Oakland (Cal.) M. C. was to Santa Rosa. The trip was made over the Creek Route to San Francisco, where the tourists boarded a boat for Sausalito; it was from this point that the run to Santa Rosa was actually started. The roads were in excellent condition, but as the

country was new to some of the riders a slow pace was maintained. In and near Petaluma—the town known all over the state for its egg output—the motorcyclists inspected several of the chicken "ranches."

When within a mile of Kawana Springs, the turning point for the run, the Oakland squad met a number of members of the Santa Rosa M. C. who had ridden out to greet the visitors. These scouts led the way back to the Springs where a fine chicken dinner was enjoyed. The homeward run was made late in the afternoon, and the Oakland enthusiasts

A YANKEE ON EUROPEAN ROADS

MAXIMILLIAN ST. GEORGE

LEAVING Cyrille's early in the morning, I rode through Montpellier, Nîmes, Remoulins, the old walled Papal town of Avignon, and up the Rhone river. In Orange, where there are some famous Roman ruins, I changed my tires around, as the rear one was in a sad state. That day, in Valence, just as dusk was falling, my clutch suddenly slipped and refused absolutely to transmit any power to the rear wheel. At a small mechanic's shop we found on dismantling the clutch that the axle connecting the clutch with the two-speed gear box had slipped the nut. When this was replaced we thought the difficulty was remedied.

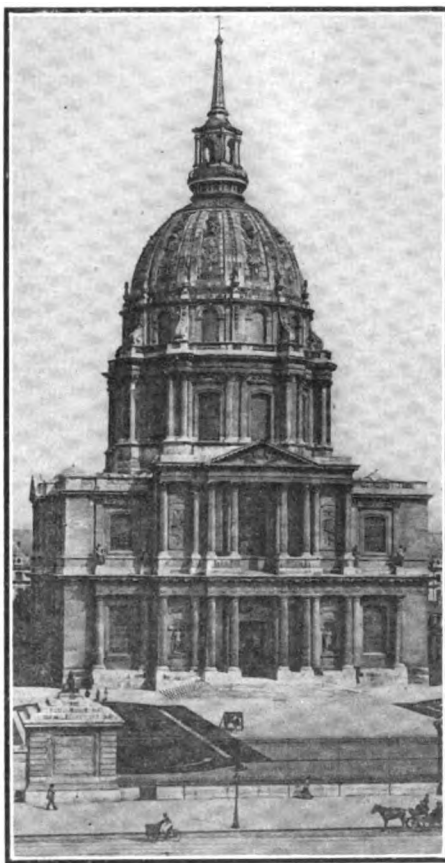
I stopped for the night at the Cafe Esteve. For 48 cents I had a very good room and bed, and a course dinner of the famous French potage; porterhouse steak, cooked in butter, eggs, fish, cake and apples and a quart of wine. One is able to secure accommodations as good as this throughout all of France, Italy and Spain, if one goes to the smaller hotels, cafes or restaurants.

Locating the Clutch Trouble.

In the morning the engine turned over but a few times before the same nut came off again. A young mechanic helped me to tinker with it, and on trying to start the nut came off for the third time. The mechanic then conducted me to a shop where an examination showed that the steel disks in the axle which help to hold the clutch to the axle, had been ripped off. The mechanic made new ones and the trouble was remedied.

For the last nine hundred miles it had been impossible to run on the spark. The lowest running speed was 21 miles. The difficulty was to start, but once started the engine ran, with plenty of gas. One can imagine it was no fun riding over rough roads or through the narrow lanes of villages, under such unpleasant conditions.

I had examined the carbureter time and again. I looked to the magneto, the gasoline, the spark plugs, the air. At Monaco a mechanic in one of the garages strained the gasoline I had brought with me from Genoa, Italy, but he declared it to be O. K. After a careful examination of the whole machine, he came to the conclusion that my trouble resulted from the fact that the specific gravity of the European gasoline was greater than that of the American, forgetting that it all comes from Amer-



Napoleon's Tomb in Paris.

ica. Each one to whom I explained my trouble laid the blame to something else, but no one seemed to be able to help me out.

Doctoring the Carbureter.

By a process of elimination I finally decided

that the carbureter was to blame. Still I could not find anything wrong. Most of the mechanics to whom I went wanted to take the magneto apart, but I could not see it that way. When I had explained matters to the mechanic at Valence, he decided to investigate the carbureter. He cleaned it out thoroughly, and as luck would have it, stuck a thin wire through the small gasoline hole in the auxiliary jet. It had become clogged and thus had caused all my trouble. The glasses in my goggles were also replaced and my bill in all was only \$1.05. The work was surely worth it.

I rode on up the Rhone against a fierce wind, which was strong enough to pick up sand and small pebbles and drive them into my face. It was cold. I had lost my gauntlets and mantle in Spain, where it had been very warm. Now that I needed them I found riding anything but pleasant. So in Lyons I bought an automobile coat—the best I could do—and a pair of woolen gloves. Some miles out of the city I stopped at an inn or auberge, paying only two and a half francs for a five-course dinner and a nice room and bed.

In the Chateau District.

The next day I rode through a pretty, mountainous country through Lozanne, Valsonne, Ampleus, Roanne, St. Germain, La Pacaudiere, La Palisse, Moulins and Nevers; then over a rolling country through La Guerche, Nerondes, Bourges and Vierzon. I was anxious to get to Montrichard and Vellieres-les Grands, where an old curé, a friend of mine, lived, so I rode in the night. Some miles outside of Vierzon I ran into a pile of sand. The carbureter became choked and I was unable to ride on. At the next house, which proved to be a chateau, I stopped. The steward kindly let me stop, after I had explained my predicament.

The next morning I was soon with the curé who received me with open arms. Vellieres is a good place to visit the different chateaux. It is in the heart of the chateaux district. Nearby are Chenonceaux, Tours, Azay le Rideau, Amboise, Blois, Chaumont, Chinon and Chambord. I rode by Chaumont, through Blois, along the east bank of the Loire, to Orleans. Then I took the road to Chevilley and Artenay; then over a flat, open country to Ymondville, where I bought gasoline at 48 cents a gallon, and spent the night and had supper at a small hotel for 58 cents.



In the picturesque Chateau District of France.

Here I had to clean the auxiliary jet again as it became clogged with paint in the gasoline, for the cans in which the fuel is sold are painted on the inside, as well as on the outside.

A few minutes' riding the following morning brought me to Chartres, where I visited the wonderful cathedral, the finest and grandest specimen of Gothic architecture in France. Below the cathedral in the crypt is the world-renowned Vierge Sous-Terre, very ancient mural decorations and remarkable stained glass windows of the twelfth and thirteenth centuries.

Parisian Duty Regulations.

A road straight as a die leads to Paris, 85 4/10 kilometers distant. For the greater distance it is bordered by young apple trees, like the German and Austrian roads. The eleven miles' strip to the city is cobble-stoned and pretty rough in places. At the Orleans Gate, on entering Paris, I had to pay 20 centimes a litre for the gasoline in the tank. The Parisian authorities are much wiser than their brethren in the other cities and towns. They will not be cheated of their octroi, that is, their duty. If you want to run your auto or motorcycle in Paris, you must pay the price for Paris gasoline, you cannot go out of the gate to buy the cheaper fuel, free of octroi. For this reason just outside all the gates there are many garages where cars are kept.

My tires were in rather poor condition and rain had made the streets very slippery. Besides my left handlebar was broken, so riding was very difficult in gay Paris.

The brilliantly lighted cafes extend out upon the sidewalks. Here the Parisian takes his drink and watches the gay crowd. No telephone poles disfigure the prospect. Everything is artistic. News-stands are bright kiosks of multi-colored glass. Even theatrical posters are pleasing. Lamp posts are artistic; the houses are regular and uniform.

Perhaps the lodestone that draws everyone in Paris is Napoleon's tomb, under the brightly gilded dome of the Hotel des Invalides. One cannot help feeling somewhat awed by it. Even though one may be perfectly convinced that the world would be better without the soldier, still his heart thrills before military genius and military heroism. Bitter controversies have swept over the name of Napoleon. Praise and blame alike have been heaped upon it; but always the glory of the prisoner of Helena is in the ascendant.

A Record Tire Repair.

The road out of Paris, through St. Denis and St. Brice, for some 18 miles is cobblestone paved and hard on motorcyclists. Then through Beaumont, Grandvilliers, Poix, Abbeville and Montreuil to Boulogne, it is very good. This is the noted Paris-Boulogne route. The country is generally level, with only a few small ascents. Nine miles outside of Boulogne, at 6.30 p. m., when it was already dark, my rear tire received a puncture. The boat



The Arch of Triumph in Paris, One of the City's Architectural Masterpieces.

for Folkestone leaves at 7.10. It seemed that the fates were against me and that I was not to reach the boat that day. I determined, however, to make a try. I located the puncture, repaired it and was on the road again, all in ten minutes. I raced on through the city and to the wharf of the Folkestone boats, which I reached just in time. My personal ticket cost \$1.80 and the machine \$2.41. It was hoisted aboard with great care. On board I cleaned the carburetor. The passage consumed less than two hours, but it was a rough one, and owing to an unstable feeling in the pit of my stomach I felt hardly able to reassemble the parts. On the boat I met a young Englishman, riding a racing model of the Indian. He was of some assistance to me.

At the docks in Folkestone, England, an agent of the Automobile Association and Motor Union, of which I was a member, helped me to pass the customs and directed me to a garage and hotel. At 2 South street I received a neat bed and room, and breakfast the next morning for 2½ shillings, or 60 cents.

Picturesque English Roads.

I took the road to Ashford and Maidstone at an early hour. Eight miles out of the latter town I turned off to Woking, via Ightham, Westerham, Godstone, Red Hill, Reigate and Dorking. An obliging clerk at a bicycle shop gave me these directions. The road, needless to say, is good but very winding and narrow. In Woking I was the guest for that afternoon and night of a young chemist and his wife. I tried to buy a 28-inch tire without success. I could not get even a tire shoe, or "gaiter," as it is called here.

All the next day through Chobham, Bagshot, Wokingham, Reading and Wallingford I inquired for a shoe, as the back tire had three very weak spots. I was able to ride on by winding tape around the dangerous places. In the old University town of Oxford I located one shoe that would fit my tires, 2½ inches. Just out of the town I spent the better part of three hours repairing the inner tube. It seemed as if every repaired spot had sprung a leak.

In Banbury I found another shoe. I reached Warwick at 7 p. m. This is the heart of Shakespeare's country. Within walking distances are Stratford-on-Avon, The Shuttery, Leamington, a watering place; Guy's Cliff,

Lord Percy's handsome country seat; Kenilworth, the loveliest of English ruins, so loved by Walter Scott. I rode on through quiet, picturesque old Coventry, the city of Lady Godiva's famous midnight ride; through busy Birmingham and smoke-emitting Wolverhampton, the metropolis of the Black country. The country from Birmingham to Stratford is a region of factories, the air is black with smoke.

On American Soil Again.

That afternoon I reached the home of my friend, Tom Owen,

who had started me on my trip the preceding July. We spent two days riding around this beautiful country, and then one morning early at 5 a. m. we set out for Liverpool, 65 miles distant. I thought my tires would not stand it, but strange to say I did not suffer a mishap, but my friend had to stop and repair his tire every few minutes. It was about one in the afternoon before we reached Liverpool.

As I had to send my motorcycle to Chicago I recreated it in the crate I had stored, and had the American Express Co. take it to the ship the next day. My friend lives in Boston, so he merely took his machine on board uncrated at his own risk. We paid only \$2.40 freight charges.

After a stormy voyage, during which a man died, one man became crazy and every one was sick, we stepped ashore at Boston, glad to be again in the land of Uncle Sam. I saw the custom officials, had my baggage examined, made for the offices of the American Express Company and asked them to forward my machine to Chicago. And so my trip to Europe was at an end. In all I covered on the motorcycle 4,190 miles. I made an average of 74 2/7 miles on an imperial gallon of gasoline.

CLEVELAND SHOW PLANS

More Elaborate Preparations Are Being Made Than Ever Before for Annual Exhibition Which Opens January 4.

ARRANGEMENTS are now being completed for the eleventh annual automobile show at Cleveland, Ohio, which will be held January 4-13. As in the past, a large section, centrally located, will be set aside for the motorcycle display, and the dealers of the city announce that the two-wheelers will be given a more effective exhibition than ever before. In past years the Cleveland display of motorcycles at the show has invariably been a creditable one, but the committee in charge of the present plans asserts that the 1913 display will be the most comprehensive outside of the national shows in New York and Chicago.

The Cleveland show is to be staged in one of the largest garages in the world, an establishment covering 63,000 square feet and with a storage capacity of 500 automobiles. This building is well located and there is every indication that it will be thronged.

The CLUB

IN MY TOWN

BY FREEMAN JARGO

How a Small Squad Struggled Through Early Vicissitudes, Fought Off Trade and Other Jealousies, Grew in Membership, and Finally Came Into Possession of a True Spirit of Fellowship.—Part I.



BEFORE we actually settled down to business and called an organization meeting of the motorcyclists in our town there was so much enthusiasm on tap that Membership Chairman Estabrook probably would have executed a few pigeon-wing steps by way of celebrating had he known of the conditions, but the first session toned us down considerably. The second or third showed outcroppings of jealousy between several of the officers, and there was noticeable coolness on the part of two agents for rival machines; I think it was the sixth meeting that developed a heated argument over changing the name of the club, and the two succeeding sessions almost put the disorganization skids under us. That we did not enter upon a rapid and ignominious slide to oblivion was due chiefly to the cool-headedness of one officer and a certain sense of sporting fairness with which the boys were blessed.

As we look back now, secure in the possession of our eighty odd members, it seems strange that mere details should have brought our young organization so near the brink of disaster, and that is one of the reasons why I feel that a frank disclosure of some of our troubles will prove of deep interest to other clubs and riders in general. When a club that has tottered on the ragged edge takes a new grip on things and holds that grip until the organization is one of the most active in its State, it is a fairly safe wager that there are numerous helpful hints sprinkled throughout its experiences.

How We Made Our First Mistake.

I believe we had fourteen riders at our organization meeting, and six of these mounted the same make of machine. It was the latter condition that brought on our first hitch. The

six riders referred to felt that they were bound together in a sort of vague brotherhood by the fact that their machines bore the same name, and they began to act as a unit. The vote of one was the vote of all, and in little or no time the riders of other machines were thrown upon the defensive. Two riders of the same make on this side voted together, three owners of another make over yonder held out stubbornly as one man, two others mapped out a little policy of their own and the last member simply rampaged to and fro, voting against every proposal, and accusing the riders of all the other machines of snubbing him because he was the sole representative in the club of his make of machine. As was intimated in the opening paragraph, a more irritating tangle could hardly be imagined.

It happened that our club was organized late in the spring, and after it had been in existence about a month the cool-headed officer above referred to managed to launch plans for a Sunday run to a small amusement place. What's more, he succeeded in having all the boys in line when the trip was started. He paired them off carefully, being certain to have each rider teamed with the owner of another make of machine, but before we had been on

Where Diplomacy Triumphed.

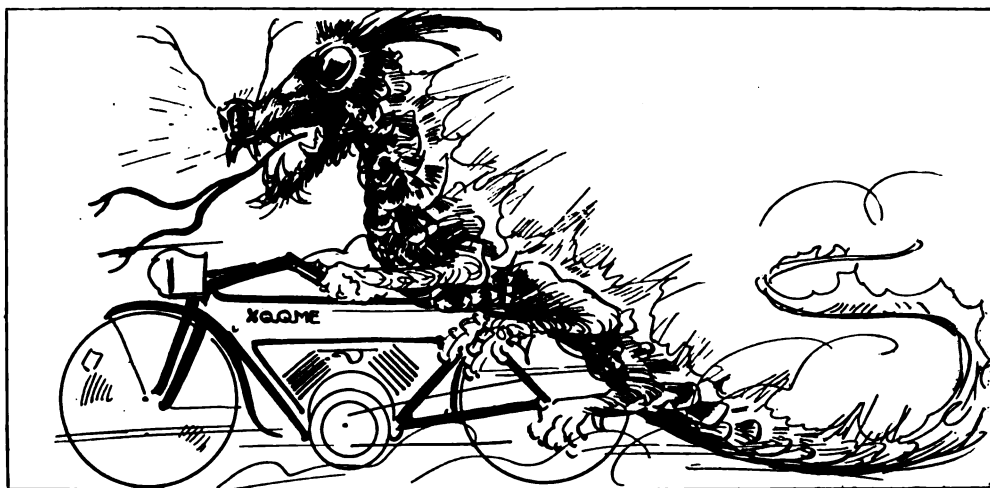
In this fashion we reached the turning point of our run, and a good dinner helped to relieve the tension. After the cigars were going, the cool-headed officer very humbly offered to exchange mounts for a short spin with a rider of a rival make, hinting that his own machine was not up to its best work and that in new hands its failings might be discovered. They made the exchange, rode off smiling and, strange as it may seem, they returned smiling. They had established a bond of sympathy, and from that moment they had plenty to chat about. The cool-headed officer then started a tactful juggling of machines, until every rider present had enjoyed a short jog on another member's mount. He called it a new system of "trouble-hunting," but he really intended it for trouble-chasing, and that's just the way it worked.

Mechanical suggestions were soon passed about freely, makes of machines were forgotten for the moment and conversation turned to the motorcycle in the abstract. At this juncture I detected a covert smile about the lips of the cool-headed officer, and I knew that his first battle had been won. He knew it, too. On the homeward run there was an

entirely different brand of conversation from that which featured our outgoing trip. Each rider had been given to understand indirectly that some one else respected his knowledge of the motorcycle, that he had been placed somewhat in the light of an adviser, and the sensation was an enjoyable one. There's no denying that our energetic officer was a great little student of human nature.

A Start on the Right Path.

This outing marked our start on the right path, but it must not be assumed that it put an end to our tribulations. Far from it. The owners of the various makes of machines were not so clannish from that time on, but evidences of jealousy could not be entirely overlooked. For example, a rider of the machine which had six representatives in the club brought an unusually striking racing pic-



"Our Club Had a Hard Time Getting Rid of the Dragon of Jealousy."

the trail half an hour each make of machine had its own little squad, and the rider of the lone mount was burning up the road ahead in an effort to prove that he did not need the companionship of the riders of any other make. There was conversation of a sort as we rode along, of course, but nevertheless the clan lines were always evident. There seemed to be a woeful lack of enthusiasm.

ture to one of the meetings and suggested that it be used as a wall decoration. Ordinarily there would have been no objection to such action, but the photograph showed this rider's make of motorcycle leading several other makes across the tape, and as might have been expected it was a trouble breeder.

Up stepped the cool-headed officer again. He offered a motion to the effect that no photographs be displayed in the rooms until pictures of each make of machine represented in the club were available. This solved the problem in a jiffy. The officer was fighting at every turn against any seeming display of partiality, and this policy had much to do with keeping the organization in existence in its early days.

The Middle-of-the-Road Policy.

In nearly every club there will be found an influential squad of riders of one or two makes of machines who show an inclination to "run things." In one city a certain make will be unusually strong, and in another town a rival make will seem to have the balance of power. However this influence trends, it is up to the club officers to offset it, to submerge machine individualities and to indicate that the rider who is the sole representative of his make of machine in the club is to be given equal respect and consideration with the rider whose mount is one of a dozen or more in the organization. As has already been shown, this policy applies to pictures of machines in the club-rooms, and it also applies to the positions given the boys when they are starting on a run and to various other small but important details.

After a club run in which one or two of the boys have suffered hard luck, the president or road captain should see to it that no slighting references to these riders creep into the columns of the local papers. Nothing hurts a seasoned motorcyclist like an insinuation that he has been incapable of handling his machine. If the story of the run is given to

the newspapers—and it should be—it may be stated that a certain rider figured in a spill, or acted as the unwilling executioner of a pup, but this can be done without belittling the unfortunate one in the eyes of his club fellows. I have known fairly sensible riders to withdraw from a club because they believed that slighting newspaper references to them had reached the paper through club channels. It is the little things that count, in motorcycling as elsewhere, and the only safe policy is the one which provides that each member shall protect his club and that the club in turn shall respect the feelings of all its riders.

The Influence of Agents.

One of the knottiest problems we had to solve, and it undoubtedly presents itself to every club that is organized, concerned our dealer members. We had three dealers on our list, each handling several makes of machines, and as might be expected there was considerable rivalry between them. Each was on the lookout for any slight advantage that might be gained by one of the machines he represented, and the other two were keen to see that no such advantage was allowed. Indirectly, the club was a business proposition with the dealers and they could not be blamed for seeing the situation reduced to dollars and cents.

As is usually the case, we held our first meeting at the establishment of one of these

dealers, and we felt called upon to mention his place of business when we gave a story of the meeting to the reporters on the following day. This went against the grain with the two other agents, and not until we had held meetings in their stores and mentioned their names in the local papers were they fully appeased. They looked upon the newspaper story as a form of advertising, and naturally each wanted his share of the publicity. Do not infer from this that all dealers are unreasonably mercenary; they are not, and they usually make the most practical and energetic club workers, but in view of the fact that the whole enterprise affects their livelihood it is natural that they should want all the consideration obtainable. What's more, they are entitled to it, but always with the understanding that they should not seek to play club factions—if the organization is unfortunate enough to have any—against one another with a view of working up trade.

(To be concluded.)

SWENSON THE VICTOR.

PROVIDENCE, R. I.—The recent five-mile motorcycle race, held in connection with an aviation meet at Narragansett Park, was won by B. A. Swenson, this city's well-known Indian agent. Fred Peterson was second and A. B. Carlson, third. All the contestants used Indian machines.

WHAT has been the most potent factor in the upbuilding of YOUR club? If the organization had to contend with obstacles in its early days, what were they and how were they overcome? What do you believe should be the chief aim of a motorcycle club?

We shall be glad to give space to letters from club officials and riders in general, dealing with these questions. In the above article the writer touches upon several problems which confront nearly all newly formed clubs, and tells how they were solved in his organization, but there are other problems and other solutions of equal interest. You need not mention the name of your club; simply write a straightforward letter telling how your squad made progress and how its experiences may help other clubs.

MUST HAVE SAFEGUARDS

Thornley Defines Protective Policy of F. A. M. on Board Tracks in Letter to Referee Gates.

THAT the policy of the F. A. M. with reference to protective devices at board tracks is now clearly defined and that the Competition Committee is determined to insist upon the fullest safeguarding of spectators at the big bowls is evident from the following letter recently forwarded to Referee Charles Fuller Gates, of Los Angeles, by Competition Chairman Thornley:

"In order to put races absolutely on the right side, you must represent to the manager of the motordrome in San Francisco, and in Los Angeles, that without delay they must put up an overhanging protection for the public, and you are hereby instructed not to issue any further sanctions to either of these motordromes until such protection has been put up.

"They must have a perpendicular boarding of at least thirty inches, measuring from the top of the incline. From the top of this thirty inches they must have a strong netting overhanging the track at about thirty degrees. This netting must be upon the strongest large-mesh wire fencing, supported by at least six by four beams not more than fifteen feet apart; the width of the overhanging portion to be at least two feet.

"I don't propose to have any accident in Los Angeles or San Francisco like the one that occurred in Newark, N. J. It is to the interest of the managers of the various tracks to see that these precautions are taken, and they are the best that have been discovered up to the present time. I am prepared to go on record as refusing sanction to any track that hasn't such a safeguard."

SNOW DAMPENED MEET.

BALTIMORE, Md.—Howard A. French had planned a fine motorcycle racing programme for Thanksgiving Day, but a fall of snow on the eve of the holiday disappointed the riders of this city and vicinity. Referee William Wood called off the events, owing to the dangerous condition of the track, but finally permitted the running off of an amateur event in heats. Harry Nagengast won the first heat in 3:21:30, and Overton Snyder romped off with the second in 3:12. Nagengast won the final in 3:13. Fred Tie-meyer, of this city, and Tommy Dedge, of Washington, were carded to fight it out for the supremacy of this district, but the condition of the track barred them from competing.

A LARGE crowd of motorcycle fans were present at the opening of the dirt track in Emeryville, Cal., on Sunday, December 1. Practically all the star riders now in the West were slated to compete on this occasion.

HOLIDAY MEET AT TAMPA

Three Events Drew Large Crowd of Speed Fans to Tampa Bay Track on Thanksgiving Day—Marsicano Stars.

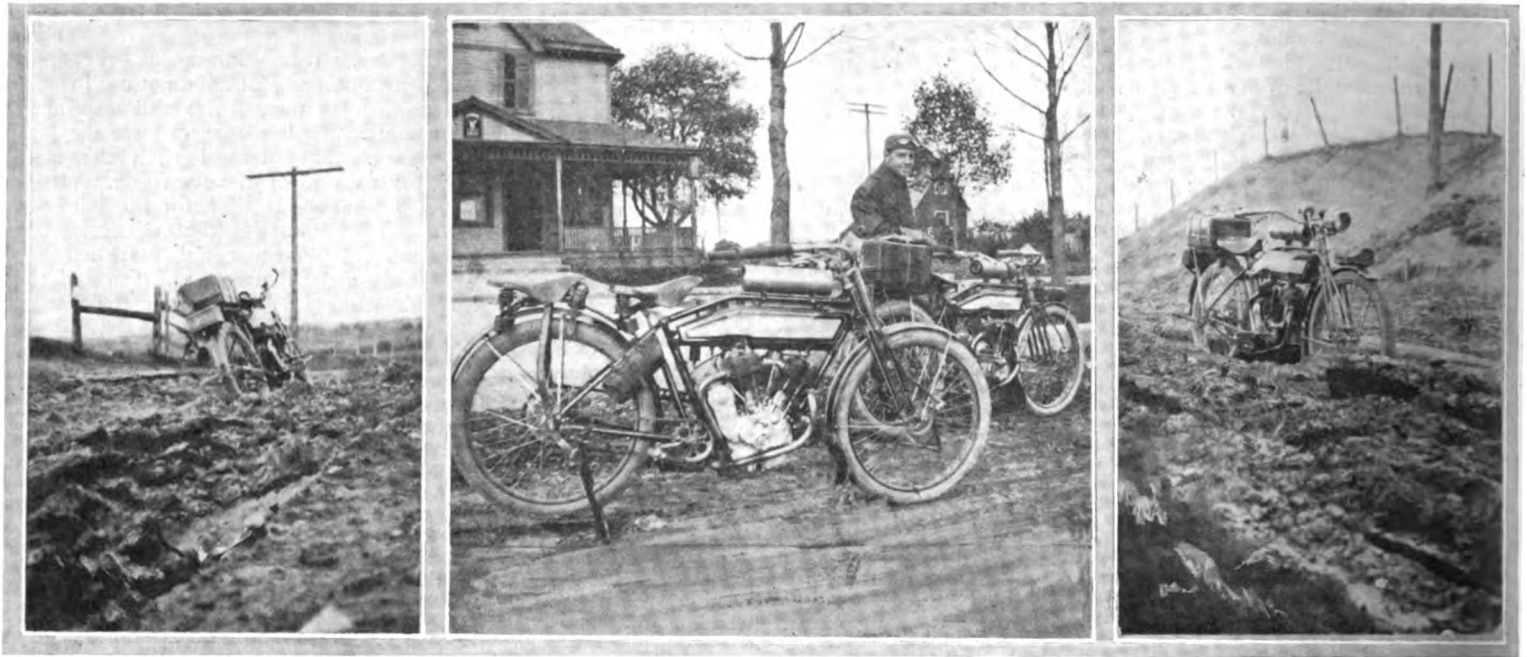
TAMPA, Fla., Nov. 28.—"Turkey Day" races were staged by the Tampa Motorcycle Club on the Tampa Bay track, a large crowd of fans turning out for the program. John Marsicano, the city motorcycle officer, showed the way in each event, with Louis Torres pushing him closely in two of them. Torres gave a game exhibition in the 10-mile handicap in which he was on scratch. His magneto cut-out failed, but he continued riding, taking the curves with one hand on the bars and the other covering his air intake. In this way he managed to slow up enough to keep his saddle on the turns, but he was unable to make up the handicap.

Three miles, stock singles: Marsicano, Indian, first; Torres, Merkel, second; Johnson, Harley-Davidson, third. Time, 4:29.

Ten-mile handicap: Marsicano, Indian, first; Torres, Merkel, second; Nowlin, Merkel, third. Time, 15:00.

Seven miles, stock singles: Marsicano, first; Johnson, second; Nowlin, third. Time, 9:32.

MEMBERS of the Salt Lake City M. C. recently journeyed to Ogden on a Sunday run.



SPEAR'S ROAD RECORDS.

EASTERN motorcyclists will be interested in learning that the two outside photographs shown above were not obtained in sparsely settled districts of the Middle West, but in New York State—between Auburn and Seneca Falls, to be more precise. They show roads over which William R. Spear, traveling representative for the Reading-Standard Company, was obliged to make his way on his recent sales-boosting trip through the Empire State and into New England. Mr. Spear reports that in one or two places the "roads" gave little or no evidence of having been laid out by man; they appeared to be endless wallows that could be dignified by the name "road" only because deeply-rutted

wagon tracks were visible.

As the photographs show, Spear's machine was sometimes down to its hubs in the mire, and it may be taken for granted that the rider's efforts to negotiate the ruts—often twelve to sixteen inches deep—resulted in many spills. Still he managed to bring his R-S machine through without a serious accident and without mechanical trouble. He covered over 1,600 miles and suffered only two punctures, both sustained from broken bottles. The centre picture shows Spear in front of a road house near Watkins Glen.

THAT CHATHAM COUNTY SQUAD.

IN the photograph below appear the members of the Chatham County (Ga.) police squad, which

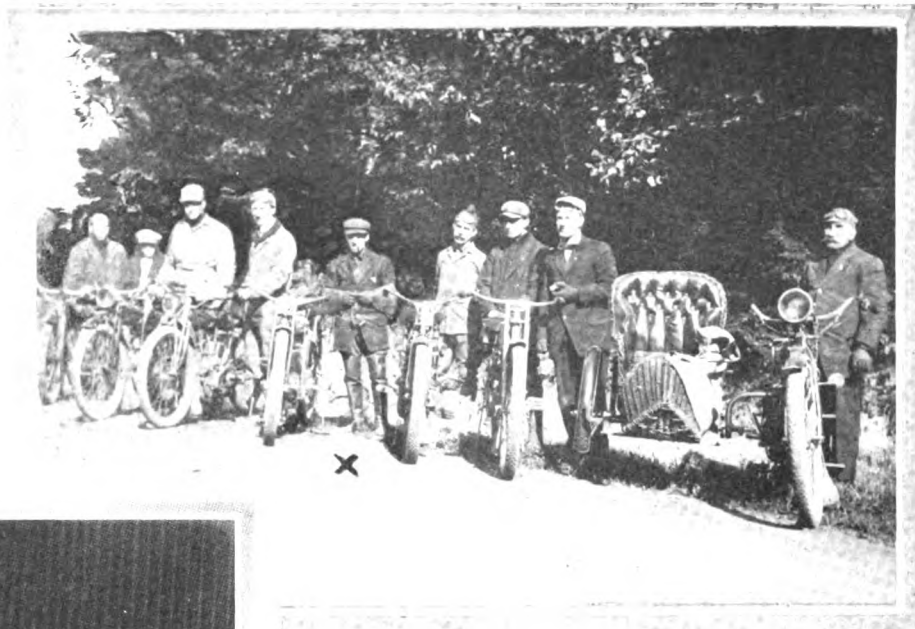


is supplied with three Indian and three Harley-Davidson machines. The squad has established an enviable reputation for "on-the-jobness" and it is likely that another rider or two will be added early in 1913. From left to right the riders are: Chief Porter McFarland, Lieutenant J. H. McGrath, Edward Harley, Paschal Strong, W. O. Dotson and James McBride.

THE panel at the right shows Mike Costello, erstwhile Merkel racer, who has just opened a shop in Yonkers, N. Y.



Claude E. Crout, Agent for M.-M. and Eagle Machines in Hyde Park, Mass., and an Indefatigable Boomer.



WITH THE BOOSTERS.

CUP-WINNER ELLS, of the Elmira (N. Y.) M. C., appears in the photograph with eight other members of the Elmira squad. The cross indicates Ells. At a recent meeting of the club he received the Eclipse Machine Company cup for having won the second annual endurance run of the Elmira M. C.

At the left is shown Art Smith, a prominent member of the Ft. Wayne (Ind.) M. C., who spends as much time above the earth these days as he does on it. Smith is known as the Ft. Wayne "Bird-Boy," and



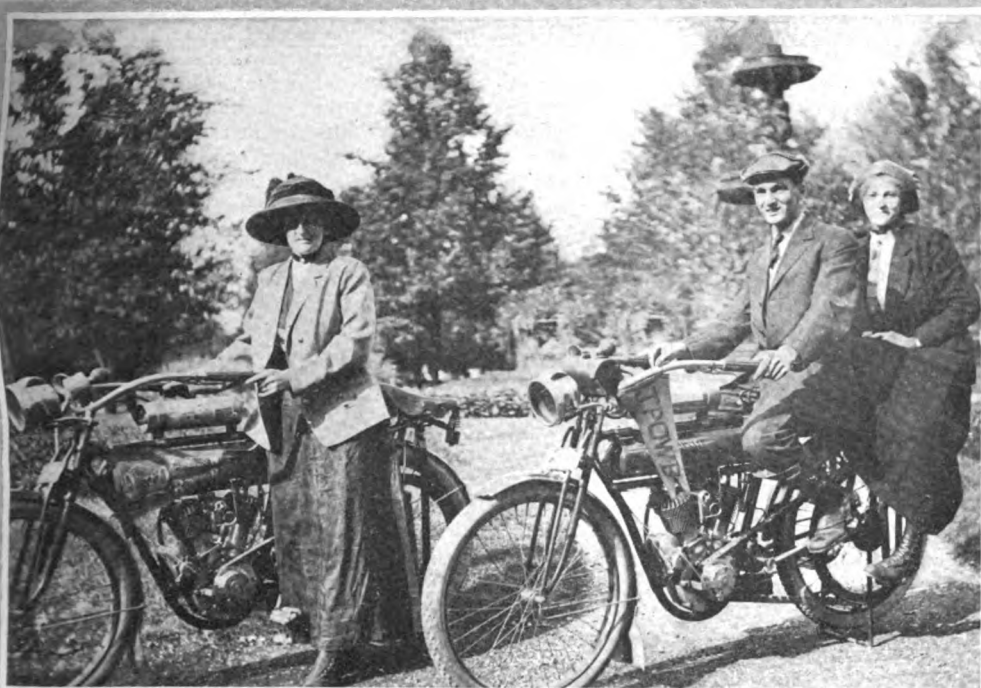
Art Smith, Ft. Wayne Club's Bird-Boy.



the photograph shows him ready for a flight with the girl who had just become Mrs. Smith.

The small photograph above shows R. C. Crist, wire chief of the Bell Telephone Company, in Trenton, N. J., who finds time to prove himself an enthusiastic motorcyclist between duty calls. In the picture Crist is taking his two little daughters for a Sunday morning jaunt into Trenton's suburbs. This rider was formerly president of the Trenton M. C., and his exploits as a roadster have endeared him to the riders of his district.

MOTORCYCLES are now being used by the Police Department of Spokane, Wash., with remarkable success.



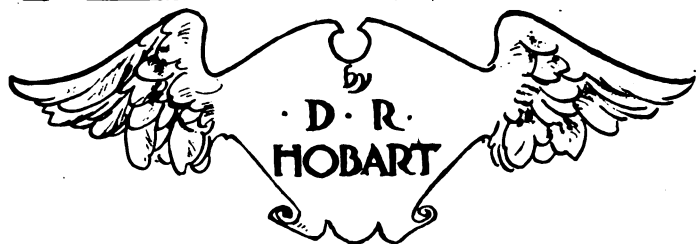
BLOOMINGTON TANDEMITES.

IN the lower left-hand photograph three motorcycle enthusiasts of Bloomington,

Ill., are shown in one of the city parks. The woman rider at the left occupies a tandem seat while her husband, who

snapped the picture, pilots their machine. There are scores of feminine tandemites in Bloomington and vicinity.

ALTERNATIVE FUELS



GASOLINE, 35 cents a gallon! Not just now, but probably in the near future, and not at a druggist's or painter's, but all over the country; such a figure may be low in two years' time. There are about 120,000 motorcycles, 560,000 automobiles, and thousands of motorboats and stationary engines in service in the United States—all using gasoline. Next season these numbers will be larger, and this means that more gasoline will be used. Roughly speaking, if all the motorcycles and automobiles were run for ten hours steadily, in one day the fuel consumed would be nearly 5,000,000 gallons.

Exhaustive Pumping.

Quite a number of new oil fields have been discovered in the last three years, but some are being rapidly exhausted even now. There are wells within 250 feet of each other in some fields, and all are pumping vigorously. The petroleum is being drawn out as fast as possible to supply the demand, and when signs of a slight shortage are evident, prices will soar; gasoline is only *one* product of the distillation, and but a small part of the whole at that.

Market Questions.

Of a given lot of petroleum, gasoline proper only occupies about 2 per cent., "benzine" or C naphtha 10 per cent., A and B naphthas each 2½ per cent., kerosene over 50 per cent., lubricating oil about 18 per cent., and paraffin wax about 2 per cent. There is always a market for gasoline—but 99 riders out of 100 never have it in their tanks at all. The gasoline, so-called, is the C naphtha or "benzine," of which 10 per cent. is distilled, whereas only less than 2 of real gasoline is obtained. The demand could never be supplied by this small proportion, hence our "gasoline" really is naphtha. Again, some of these other products do not find the ready sale that the "gasoline" does; refiners therefore limit the amount of crude oil distilled unless they can dispose of the whole production and not have part on their hands for storage. Hence, a fluctuation in the prices of gasoline and kerosene. The remedy for this is an increase in the price of gasoline until it is commensurate with the loss or reduction on other products. But such a move would hardly be submitted to by users, unless they were forced to accept it; with no other fuel available they would have to.

The Remedies.

Whether a rise in price is due to market conditions or to actual shortage in production, there are two remedies for motorcyclists; more economical carbureters or alternative fuels. Unless widely adapted, the first remedy would effect but a small saving in fuel, and at best would only give partial relief, as a shortage would leave the user nearly as badly off as before. As it is not within the province of this article to discuss carbureter construction, attention will be turned to the question of fuels.

Fuels Available.

At the present time, the following fuels are available as alternates to gasoline: kerosene, benzol and denatured alcohol. These fuels only are considered because they (a) can be manufactured on a large scale; (b) at a moderate price; (c) can be used with varying success in the present motorcycle motor. It would be useless to consider alcohols, whose cost is prohibitive and which are not obtainable in sufficient quantities. The author has divided these into "Natural base" and "Manufactured" fuels, for convenience.

Natural Base Fuels.

(1) Kerosene.—Over five times as much kerosene is produced from a given amount of crude petroleum as of naphtha, hence short of an oil starvation, the quantity would be more than sufficient. For a given motor, the horsepower developed with this fuel has been found to be very slightly in excess in a few cases, but in general it is practically the same as with gasoline. The compression pressure need not be changed but the kerosene, being a heavier spirit than gasoline (0.80 as compared with 0.68) contains more carbon, and the carbureter must be heated in order to thoroughly vaporize all that can be vaporized of the oil. A rather heavy soot is deposited in the cylinder when kerosene is used, but with proper design of carbureters, this can be reduced until no more is deposited than when using

gasoline (naphtha C). At present, there are practically no carbureters for kerosene obtainable for motorcycle use. The fuel consumption is about the same. The price per gallon varies from 10 to 15 cents, in barrel lots.

(2) Benzol, also called benzene.—This is a very important by-product obtained from the distillation of coal-tar. It is the source from which aniline is prepared, and therefore is widely used in the preparation of aniline dyes. After passing through various scrubbers and washers in the refinery, it emerges as an oil of 0.88 specific gravity, and can be used in a gasoline motor with slight pre-heating, as when kerosene is employed. Carbureter changes would be chiefly in the provision for an exhaust jacket and a larger jet opening at all speeds. The consumption is less than that of gasoline per mile, and the carbon deposit is less than that of gasoline. Prices at present are the same as kerosene, but they fluctuate according to the state of the market.

Manufactured Fuels.

(3) Denatured alcohol.—This is obtained by mixing wood alcohol with malachite green or some other deodorant to prevent its being taken "for medicinal purposes." It can be used on gasoline motors without structural change, after the motors have been warmed up, but at nearly 1.8 times the fuel consumption. The power, however, is increased nearly 10 per cent., so that conditions about balance. There is very little of this fuel produced as compared with gasoline or benzol, owing to the revenue laws in this country. Sooting is insignificant, in some cases hardly noticeable in runs with this fuel that the author has made. Better results, however, have been obtained in consumption by the use of compression pressures of 100 pounds and over, but this would involve the re-designing of the motors used on two-wheelers. The price is about 30 cents per gallon at present.

Compared with gasoline, alcohol gives the greatest corrosion of the fuels named, benzol (when not thoroughly refined) coming next. The corrosive action of denatured alcohol is very slight, and of properly refined benzol it is no more than that of gasoline. Corrosion includes valve-pitting, let it be understood. Gasoline and benzol behave similarly under storage, both giving off explosive vapor and getting "flat" with age. Kerosene and alcohol

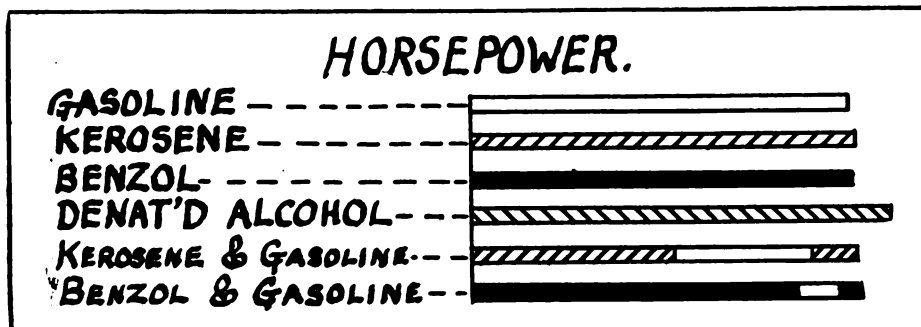


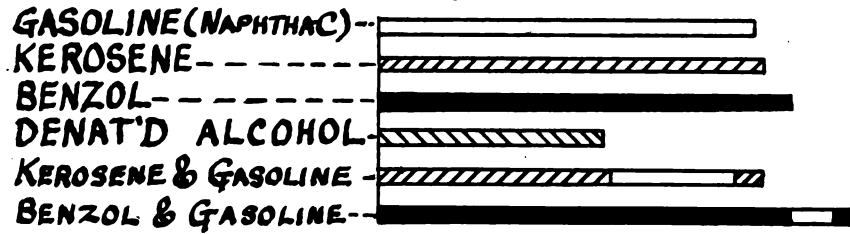
Table Showing Power Production of Different Fuels.

are much less volatile, and therefore safer to store.

Fuel Mixtures.

Experiments with mixtures of the above fuels have shown excellent results. With a mixture of benzol and gasoline, an automobile at Brooklands, England showed a mileage increase of 26 per cent. over that obtained when gasoline alone was used. The proportions were: 90 benzol to 10 gasoline (0.67 sp. gr.). With kerosene and gasoline mixtures, the mileage per gallon has been increased to a slight degree, at approximately the same consumption of either fuel. But with such a proportion as 66 per cent. of kerosene and 34 per cent. of gasoline, the cost per mile would be

MILEAGE.



less than with gasoline alone. In the cases mentioned the regular carbureters were used. The motor firing the benzol mixture being warmed up, while that using the kerosene mixture was started cold.

The pains taken in developing the gasoline motor have been enormous, but very little has been done aside from isolated experiments.

it is impossible to state. It certainly will not be a mixture of alcohol and benzol, as there is no gain in any direction, and difficulty in combining. There is a big field open to fuel investigators concerning either of the first-mentioned spirits, even though the toes of other industries may be trodden on in the process. This applies also to fuel mixtures.

STANDARD SPEEDOMETER FOR 1913

A NUMBER of interesting and important changes will be found in the Standard motorcycle speedometer for 1913, manufactured by the Standard Thermometer Company, 65 Shirley street, Boston, Mass. For example, a special long axle is supplied, with a swivel fitting attached and adjusted, so that it is ready to be placed on the motorcycle. This axle will replace the one originally furnished with the machine. It has been considered necessary to supply this axle in order to obtain a swivel fitting with sufficient bearing surface to prevent wobbling after short usage. The bearing surface is now three-quarters of an inch long, which is as great as is found in the rocker arms of most motorcycle spring forks, although there is no pressure on the new bearing except the weight of the fitting itself.

Castellated nuts are used on the ends of the axle, and holes are drilled so that cotter pins may be inserted. The swivel fitting is drop forged and is much stronger than the one previously used which was of composition metal. Both the special axle and the forging are case hardened, and this adds to the durability of the swivel fitting bearing. The bevel drive housing has also been made considerably heavier, and a strengthening rib has been added where the rivets attach it to the rigid tube. A new flexible tubing is now being used. It is a product of the Standard company, and is made of a single strand of steel stock, of a special rolled section, which gives exceptional strength. Being patented by the Standard company, this tubing will not be found on other speedometers.

A new device is used in the head which prevents vibration at high speeds. The bevel gears are now made of nicked steel, which tests have shown to be about twenty times as durable as the ordinary steel gears previously used. An adjustable ball bearing is used in the bevel joint, and a ball bearing shaft coupling is used where the speedometer is attached to the head. Handlebar clamps will be furnished on all models which will permit of the speedometer being placed in front of the bar, instead of behind it, if the user so desires.

H.-D. CONTRACTS.

HARRY SVENSGAARD, Harley-Davidson agent at Detroit, Mich., has contracted for 250 machines for the coming season. Another contract for 250 machines has been received by the Harley-Davidson Company from the Enterprise Motor & Cycle Company, of Oklahoma City, Okla. Contracts have also been received from Arthur Ferris, of Utica, N. Y., the Harley-Davidson Sales Company, of Celina, Ohio; O. S. Hitchcock, Toledo, Ohio, and F. L. Jackson, Walla Walla, Wash.

MORE POPE LAND

WITH a view of making extensions in the near future to keep abreast of its business the Pope Manufacturing Company, of Hartford, Conn., has just purchased six additional acres of land adjoining its present plant in Westfield, Mass. The Westfield factory is already extensive, comprising 165,000 square feet of floor space, but there are indications that more room will be needed at no far distant date, and the company is now ready for developments.

ALBERT BROWN received the headlight given by the Topeka (Kan.) M. C. for attending the most 1912 runs.

HINDS BACK FROM TRIP.

ROBERT HINDS, sales manager of the Consolidated Manufacturing Company of Toledo, Ohio, has just returned home from a trip through the east in the interest of the Yale.

Visits were made at Cleveland, Buffalo, Rochester, Syracuse, Rome, Utica, Albany, Schenectady, Boston, New Haven, Bridgeport, New York, Newark, Trenton, Philadelphia, Baltimore, Washington, Richmond and Norfolk, Va., and in every one of these cities indications point to a big increase in business for 1913.

"Those who think that the official estimate of 150,000 motorcycles as the output for 1913 is high, should have been with me on my trip through the east," said Mr. Hinds on his return to Toledo.

"Two short weeks, hustling from town to town, convinced me that if anything this figure will fall short of the mark."

A DEALER'S TEST TRIP

ON a recent trip from Manchester, N. H., to Brockton, Mass., J. E. Forrest Eagle agent at the former place

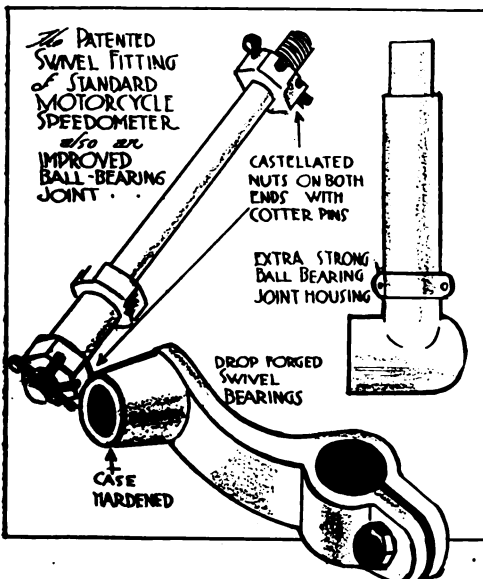
averaged better than 38 miles an hour. He left Manchester at 7 a. m. and arrived in Brockton at 10.55 a. m. He made stops at Lowell and Boston, totaling 50 minutes, thereby making his actual riding time for the 115 miles just three hours and five minutes. Mr. Forrest returned home the same day, after leaving a contract for a consignment of 1913 Eagles.

IJAMS GOES TO CHICAGO.

R. L. IJAMS, assistant to C. A. Gilbert, Western district manager of the United State Tire Company, has been transferred to the central district under J. C. Weston, with headquarters in Chicago, Ill.



Design of Medal Awarded for Recent Endurance Run of National Capitol M. C., of Washington.



SOME SNAP-SHOTS AT ENGLISH SHOW IDEAS

New Machine and Equipment Features That Have Won Favor With Britishers at Olympia

VISITORS to the English Show at Olympia found so many motorcycle novelties to interest them that it is difficult to make up a list of those which attracted most attention, but the accompanying sketches show a number of devices and equipment specialties indicating the trend of manufacturing on the other side. It is worthy of note that much of the ingenuity of English designers of late has gone into devices for protecting both machine and rider in all-year riding, probably a dozen of the most unique attachments taking the form of improved mudguards and other weatherproofing fittings.

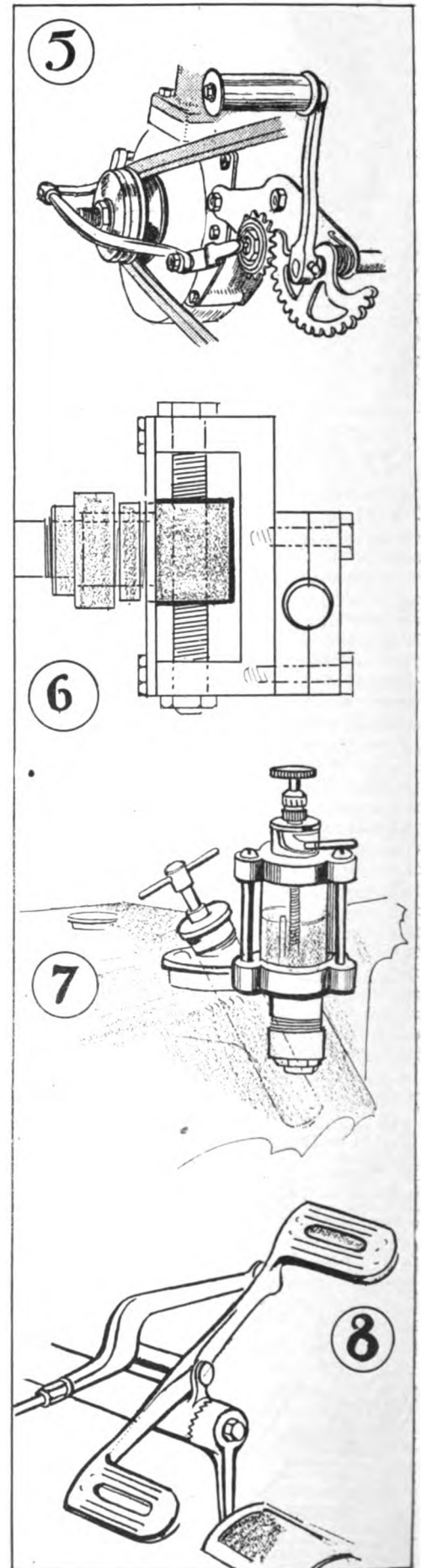
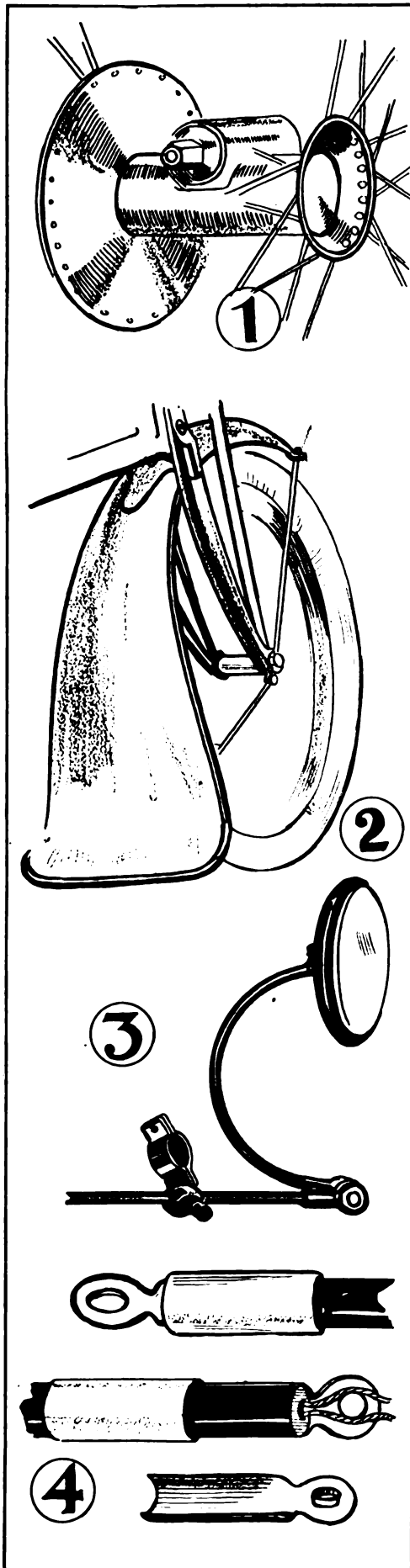
In Figure 2, at the left, is shown a rather imposing mudguard and splasher fitted on the 1913 Triumph machines. This is of such width and stability that it is credited with eliminating the necessity of a special shield over "non-armored" magnetos. Figure 1 shows the novel method of securing the rear wheels on the Humberette with a cotter pin, the device being equally simple and effective.

A type of handlebar mirror, manufactured for use on English machines, is shown in Figure 3. It is being marketed by Dunhill, and is so constructed that it may be twisted to reflect light on any portion of a machine which may need adjustment or repairs at night. Experienced riders who have been called upon to unlimber a heavy lamp or strike matches to locate a source of trouble after dark will appreciate the value of some such fitting. Figure 4 shows an ingenious form of terminal which made its appearance at the Show. It is made up of two sections and the wire is wound around a projecting eyelet after which the two parts are pressed together and the sleeve slipped forward as a retaining case-

ment. Figure 5 shows the L. M. C. kick-starter, high-speed clutch and operating mechanism, and Figure 6 is a new feature of the Montgomery sidecar. It shows a simple and sturdy device for adjusting the height of the rear portion of the passenger attachment, and is proving an attractive feature of the Montgomery product. Figure 7 shows the Davison continuous sight feed lubricator. It consists of a glass reservoir which holds a quantity of oil; this is allowed to flow by gravity to the motor, the flow being controlled by means of an adjustable needle valve. Should it be necessary to inject a whole pumpful at once a simple device will permit of this action. Figure 8 shows the geared-down clutch pedal on the new Triumph machines.

BIG DISPLAYS ASSURED.

A RECENT report from the Automobile Board of Trade shows that more than 2,000 products will be on exhibition during the two weeks of the double New York Show.



DULUTH TO MARQUETTE, MICH.

GEORGE A. NOWAK.—From Duluth go to Superior (5.6), caution at end of bridge (3.2 miles) for under viaduct. From Superior go to Allouez, then to Itasca, Rockmont, Hawthorne, Lake Nebagamon, Mount Vicker, Brule, Iron River and Ashland. Distance 80.3 miles. Caution at danger points (5.8) bridge under viaduct; (31.6) left bend with sandy road; (37.2) sand hill; (52.7) large rock in road; (53.9) another rock; (57.8) steep hill; (58.3) short descent; (60.1 to 60.7) road rocks and bad hills; (63.0) bad hill; (67.0) S-turn; (67.1) log fill; (68.1) turn. From Ashland go to Marengo, High Bridge, Mellen, Glidden, Butternut, Park Falls, Fifield and Phillips, 85.4 miles. Caution spots at (16.0) clay hill, bad bridge and hill in succession. From Phillips go to Worcester, then to Prentice, Spirit Falls, Tomahawk and Rhinelander—65 miles. From Rhinelander go to Enterprise, then to Pelican, Jennings, Crandon, Laona, Padua, Soperton, Townsend, Lakewood, Crivitz and Marinette—132.2 miles. Go to Menominee, across the river. From Menominee go to Hansen Station, then through Wallace, Ingalls, Stevenson, Daggett, Talbot, Bagley, Carney, Nadeau, Powers, Spalding, Wilson, Houles, Indian Town, Harris, Bark River, Narentas, Hyde to Escabana. The distance is 65.4 miles. From Escabana go to North Escabana, then through Wells, Gladstone, Kipling, Masonville, Rapid River, Osier, Trenary, Carlshend, Skandia, Yallmar and Harvey to Marquette—72.1 miles. In general, roads are fair with some good and some poor stretches. The route is most roundabout, but is the best. A more direct route across Gogebic, Ontonagon, Baraga and Marquette (Mich.) counties, might have to be traversed pushing most of the way.

VINELAND, N. J., TO CHATTANOOGA.

C. A. CONNERY.—Go up to Philadelphia through Newfield, Malaga, Franklinville, Clayton, Pitman Grove (toll gates), Woodbury, Gloucester and Camden, N. J. From Philadelphia take route 61 (Touring Number of MOTORCYCLE ILLUSTRATED) to Gettysburg, Pa. Next take route 54 to Staunton, Va. Then take route 93 to Roanoke. From Roanoke go through Salem, Christiansburg, Pulaski, Wytheville, Marion, Abington to Bristol. This follows the Washington Highway. For route from Bristol to Chattanooga via Dandridge, write the American Automobile Association, 437 Fifth avenue, New York. The route can be covered with a 4 h. single, but Southern roads are seldom first-class. Road conditions are given with each tour mentioned.

FRAME RECONSTRUCTION.

LELAND WRIGHT.—We think that Voelker & Campani, Seventy-fifth street, near Amsterdam avenue, New York City, can serve you as regards frame reconstruction. This is a small firm, the junior partner of which is a first class frame-man. To get work of the kind you mention into good hands is very difficult and it does not pay any big company to perform a single reconstruction; hence your lack of success with those you mention.

FOREST EBRIGHT and his sister, of Lyons, Kan., are motorcycling to Decatur, Ill.

ECLIPSE VS. HENDEE**Suit Instituted by the Former for Alleged Infringement of Its Free-Engine Clutch Patent.**

THE Eclipse Machine Company, of Elmira, N. Y., claiming the sole and exclusive right and license to manufacture and sell clutches under United States letters-patent No. 1,018,890 and 1,018,891, granted to Frederick S. Ellett, has instituted suit in the United States District Court for the Eastern District of Pennsylvania (Philadelphia), against the Hendee Manufacturing Company and George S. Maslen, Indian agent in Philadelphia, for an injunction and accounting of profits and damages for the infringement of these patents, the alleged infringement being the clutch used on Indian motorcycles.

It is understood that the Eclipse Machine Company will take additional action against other Indian dealers in various parts of the country.

The Hendee Manufacturing Company, in its turn, has advised all its dealers that it will assume full responsibility in the premises, and defend all such suits in behalf of any dealer against whom action is instituted.

R-S EXPORT DEPARTMENT.

THE Reading-Standard Company, manufacturers of the well-known line of R-S motorcycles, announces the establishment of a thoroughly-equipped export department at Cleveland, Ohio, to take care of its constantly growing business abroad. Desiring to extend to its customers abroad the same service, the same careful attention to details, which have made this line so popular among its agents and customers in this country, they have engaged the services of W. P. Street, one of the best posted export men in the United States. Mr. Street has made a careful study of the conditions to be met in foreign countries and their methods of doing business, and is in a position to supply the wants of the foreign buyer with intelligence and dispatch.

Catalogues will be furnished, and correspondence carried on in the language of the country from which inquiries are received, and if foreign readers will address the Reading-Standard Company, 2015 Corning avenue, Cleveland, Ohio, U. S. A., their inquiries will be given Mr. Street's personal attention.

THE INDIAN IN FRANCE.

NOW comes an Indian invasion of France, the birthplace of motorcycles. At the annual French automobile salon, running at Paris this month, 1913 Indians, both singles and twins, will be exhibited for the first time by the Paris agents, Chartier-Desvarennes & Co., 48 Rue St. Ferdinand. The Indian machine is no stranger in the land of Napoleon, for it has won several important competitions there, most notable of which was the carrying off of the French Grand Prize road race August 25, by Oliver C. Godfrey, who covered 279 miles at 42½ miles per hour.

REPP'S ATTRACTIVE CALENDAR.

B. F. REPP & SON, Bryan, O., who sell Indian motorcycles in that territory, are first in the field with a handsome calendar for 1913. The dominant idea is an excellent oil painting reproduction of Kicking Bear, a famous Sioux chief, a most appropriate subject in this instance.

TORONTO CLUB INDIGNANT.

TORONTO, Ont.—At the last regular meeting of the Toronto club there was a lively discussion regarding the action of Bob Scott who carried off a number of first prizes in private owners' races during the last season. Under the ruling for private owners it is required that the machine be owned by the rider and that it be a stock machine. It was found that the engine Scott had been using was far from being a stock model, and that it had been used in another frame in trade riders' races. It was an exceptionally fast engine and when being examined was found to be a 1912 type with a 1909 piston, drilled out so as to reduce the weight.

As Scott was a member of the club and had been found acting against the ruling of the C. M. A. in an unsportsmanlike manner the members demanded that he be expelled from the club. This was unnecessary as the president had Scott's resignation in hand. Some of the members were in favor of not accepting the resignation but of expelling Scott from the club in order to show the club's disapproval of all unfair work in the racing game. When put to a motion, however, the resignation of Bob Scott, as well as that of his brother, J. Scott, was accepted.

Regarding the obtaining of club rooms Alex MacLean was instructed by the club to go ahead and secure suitable rooms in order that the club be able to have permanent quarters as soon as possible. A committee was appointed to purchase furnishings for the rooms.

As the elections are scheduled by the constitution to come on the first meeting of the new year nominations were opened and those for the various offices accepted. These nominations are open, however, until the next meeting.

HAMILTON'S SUNDAY RUN.

HAMILTON, Ont.—Members of the Hamilton Motorcycle Club enjoyed a run on Sunday, November 24. Their original plan embraced a run to Galt and Guelph and return, but this was changed, as after lunch at Guelph, but 28 miles from home, the sky looked so threatening that they decided to make a bee-line for Hamilton. No sooner had they got clear of Guelph than the rain came down, accompanied by snow. This made the roads about as disagreeable as could be. In ordinary weather they are in fair condition but with a mixture of rain and snow they became so slippery that it was truly a mud-larking expedition. When two rather steep hills were encountered about seven miles from Hamilton the mud made it impossible to keep upright. The riders entered into the spirit of the fun and realizing that they could not get any more mud on them than they carried at the time negotiated the grades at good speed, only one or two being successful.

GOODLOE IN ATLANTA.

T. B. GOODLOE, who has been in charge of the Richmond, Va., sub-branch of the United States Tire Company, has been appointed manager of the Atlanta (Ga.) branch of the same organization. Mr. Goodloe is succeeded in Richmond by J. G. Given.

CARRYING THE GOSPEL.

ONE of the most trying problems confronting missionaries in tropical countries is that of transportation and this has been satisfactorily overcome by quite a few missionaries who have adopted the motorcycle for such service.

FIGURING *the* GRADIENT ^{by} DWIGHT B. PANGBURN

NEXT to "How fast can you go?" the average motorcyclist is most interested in the question: "How does the machine take the hills? Can it take you over everything, and does it do it fast or slowly?"

We all like to tell how our machine took us over a 20 per cent. or 25 per cent. grade "the

chine. On this the dial is pasted or mounted with thumb tacks. At the center of the dial is a small bolt on which the hand or pointer is hung. The weight on the lower end of the pointer must be four or five times as great as that of the upper end in order to get good results. In my apparatus, as can be seen,

time, and if I want to find a grade I merely stop the machine, take out the gradometer and set it on top of the tank, read it and put it back in my pocket. If greater accuracy is desired I use the larger instrument, which clamps to the machine.

Instrument is Easily Adjusted.

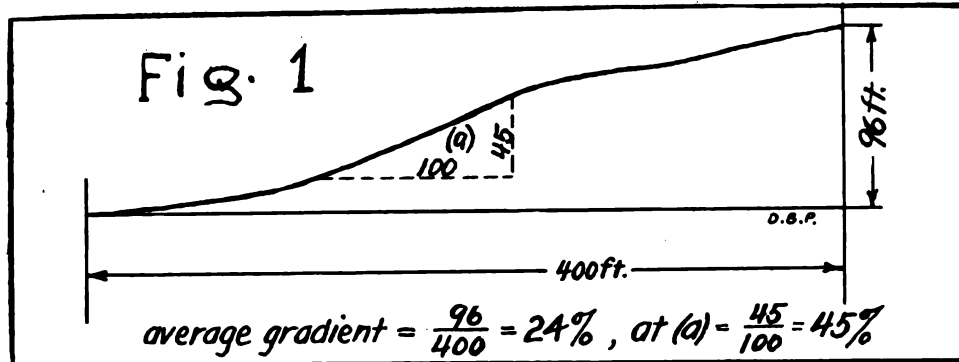
Only one adjustment has to be made in preparing this gradometer for use. Place the machine on a level floor or walk, on its tires, and adjust the dial-board or bend the pointer until it points to zero. Then all that is required to find any grade is to stop the machine with the gradometer in position and look at the dial. It will give the grade directly in per cent., whether you are going up or down hill. Of course if desired the instrument may be adjusted to read zero when the machine is on its stand on a level. In this case, however, it must be placed on the stand on the grade for a reading, which adds some unnecessary work. The instrument can not be read accurately when the machine is in motion because of vibration and wind, mainly the latter.

The materials to make the gradometer will hardly exceed 5 cents or 10 cents, and the time required is small, while the satisfaction in knowing the grades is considerable, and the gradometer can be used in connection with the speedometer to find the horsepower required in hill climbing. The following rule will give approximately the maximum horsepower which can be developed at any adjustment of spark and throttle: Multiply the combined weight of the machine and rider by the average speed in miles per hour and by the grade in decimals (4 per cent. = 0.04). This result, multiplied by 0.057, gives approximately the maximum power which the engine will develop at the adjustment of spark and throttle used in climbing the hill.

A SOUTHERN TRIP.

E. G. BAKER and E. W. Meyerrose, of the Indianapolis M. C., are planning to start on a tour to Cuba during the first week in January. The route which they have selected will bring them through practically every Southern State. They will ride twin Indians and use United States tires. Baker is a tester for the United States Tire Company, and Meyerrose is connected with the G. H. Westing Company, Indian agent in Indianapolis.

IT is estimated that there are 20,000 motorcycles in use throughout Germany.



other day," but a good many of us hardly know what a 20 per cent. grade really means. A glance at Fig. 1 will show how the per cent. of the grade (or gradient, for the two words are synonymous) is figured. The average grade is shown to be the vertical distance between the points at the top and bottom, or upper and lower ends of the grade, divided by the horizontal distance between the same

points. Thus the average grade is $\frac{96}{400} = 0.24$, or 24 per cent.; while at (a) the grade, at the steepest part, is shown to be 45 per cent.

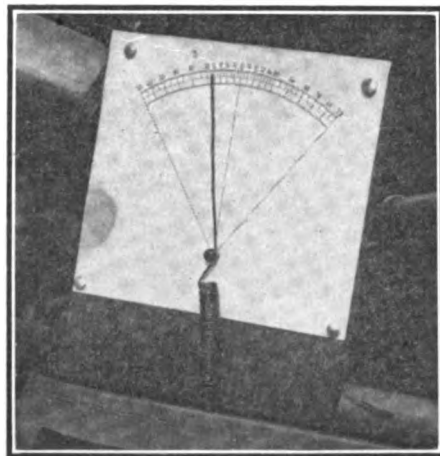
A gradometer is, of course, an instrument for telling the grade. There are many kinds of gradometers, ranging from the kind where one gets down on his knees in the road with a spirit level and two or three sticks, and thus gets data for figuring out the grade at a later date, to the kind, called the gradienter, which a surveyor will use if you employ him to tell you the grade. Others use liquids enclosed in glass, so there is danger of breakage, and all require some figuring to get the results in the form of per cents.

A Home Designed Gradometer.

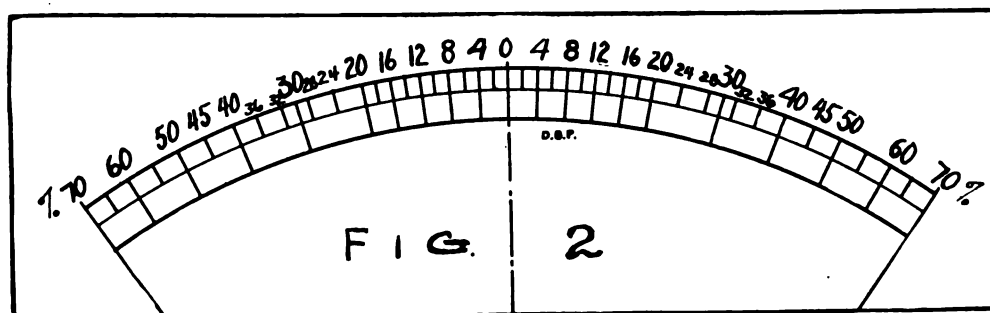
The following description is of a gradometer which I devised and have used for some time very successfully with my machine. It is a handy instrument and eliminates guessing, as it is accurate probably within half of 1 per cent. Its principal advantages are that it can be easily carried and used, and that it can be read directly without any figuring and without leaving the saddle of the machine. The dial is shown in Fig. 2. The picture shows the instrument mounted on the backbone of the machine, on top of the tank, and in operation, showing that the machine is standing on a 17 per cent. grade, which I may add is on one of the best residential streets in the city of New Haven, Conn.

The gradometer consists, as shown in the picture, of a piece of $\frac{1}{2}$ -inch board, about 6 x 8 inches, arranged with a sheet metal clamp to fasten to the backbone of the ma-

chine. The pointer merely consists of a piece of heavy copper wire with two loose turns around the bolt and a couple of feet of the same wire wound in a close coil to get the weight at the bottom. If the coil contains six times as much wire as the pointer the weight will be sufficient for accuracy. Care should be taken to have the pointer swing freely on the center



so as to avoid sticking and consequent error in reading. For general use a smaller instrument is desirable, and for such a purpose I use an instrument which is only 3 x 4 inches over all. This is so small that I can easily carry it in my pocket, which I do most of the



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J. LEO SAUER
President

EDITORIAL VIEWPOINTS

**THURSDAY
DEC. 12, 1912**

Entered as second class matter July 6, 1908, at the Postoffice at New York, N. Y., under act of Congress, March 3, 1879.

H. N. CONDUCT
Secretary

IN adopting a "hands off" policy relative to Canadian dealers who might make application for an F. A. M. registered shop certificate, the Federation has eliminated the possibility of serious entanglements and acted in fairness to all concerned. There is no reason for questioning the ability and willingness of the C. M. A. to handle its family affairs, and the acceptance by the F. A. M. of an application from a Dominion dealer—who for obvious reasons should first affiliate with his home organization—could hardly be regarded as otherwise than discourteous.

IT is quite within the range of possibility that the F. A. M., operating with a limited knowledge of Canadian developments, might in time unwittingly extend its special privileges to a dealer who had been refused such consideration by his home organization, and thus place itself in the embarrassing position of sustaining the individual dealer against the governing body in his own territory. The probable effects of such a contretemps invite most unpleasant conjecture.

ANY Canadian dealer who contemplated registering his shop with the F. A. M. must have had in mind the business to be derived from American tourists who go over the border, and in this respect his ambition is to be commended. We believe, however, that a C. M. A. certificate and registered repair shop sign should and will carry as much weight with an F. A. M. rider on Canadian soil as the emblem of his own organization would carry here in the States. This is as it should be, for the present working agreement between the two associations certainly is intended to imply that the American over the Canadian line, or the Dominion rider in the States, shall expect and receive the same consideration extended to him on his own stamping ground.

CARELESSNESS on the part of a Chicago motorcyclist resulted in serious injury to a pedestrian and led Municipal Judge Stewart to refer to the motor two-wheeler as a "deadly weapon." Of all anathemas hurled upon the motorcycle this is probably the most scathingly unjust. While called forth by the negligence of one rider, it is applied to the motorcycle in the abstract, and thus becomes a powerful and cumulative force by which otherwise liberal-minded citizens are permanently influenced against motorcycles. In the Chicago instance the rider evidently deserved his sentence—thirty days of geological research, with one of the county rock-piles as

a base of operations—but Chicago motorcyclists in general and the trade in that city do *not* deserve the hostility that will be aroused in certain quarters as a result of Judge Stewart's denunciation.

IT is the purpose of these paragraphs simply to point out the responsibility of the individual rider. Tollinsky—our geological friend—is accused of giving his attention to a girl tandem passenger with the result that he ran past a halted trolley car and struck a youth. Had he kept in mind the fact that motorcyclists throughout the country are striving to live down a costly and exaggerated reputation for recklessness, that his actions would reflect, creditably or otherwise, upon his brother riders from coast to coast, he would have kept his eyes ahead and avoided trouble. The accident itself consumed only a few seconds, Judge Stewart was prompt with his "deadly weapon" charge and Tollinsky will be free of the rock-pile in thirty days, but it will require months of perfect behavior on the part of Chicago's motorcyclists to offset the unfavorable influence that has been set at work.

THERE is much to say in behalf of an American motorcycle classic along the lines of the English Tourist Trophy races, and, possibly, a minor argument or two that may be raised in objection. Assuming that there are cons as well as pros, let us have them threshed out thoroughly in order that the Chicago club, which has been sufficiently energetic to take the initiative, may be given a fair working basis. If the Chicago enthusiasts are encouraged to the point of undertaking a national event, the encouragement should continue until the classic has gone down in American motorcycle annals as a success, and this implies practical co-operation on all sides. In short, here is the question, shorn of verbiage and hammered down to bed-rock: Are we ready for the American motorcycle classic?

IF we decide in the affirmative—and from the writer's present angle of vision there appears to be no formidable reason for an adverse decision—we should enter upon the project with a determination to furnish a program worthy of comparison with the famous T. T. races, and we believe this to be the aim of the Chicago motorcyclists. We have riders, plenty of them, who balk at nothing; machines that jog from coast to coast with almost monotonous success, and no end of racing spirit. What else is needed? Let

us put our heads together, metaphorically, at least, thresh out the whole proposition—from the viewpoint of the manufacturer, as well as of clubs and riders in general—and then be fair enough with the Chicago club to say just what we think of the undertaking.

IN a recent hill-climbing program the Toronto (Ont.) M. C. included an event for sidecars, thus affording further proof that the third-wheel attachment is as capable of demonstrating its versatility on this side as in England. There has been no reason to believe to the contrary, of course, but we have been a trifle slow to admit that sidecars have a legitimate field away from the boulevards. In this connection it may be well to note that the winning sidecar outfit in the Toronto event romped up the hill with its passenger, then returned to the bottom and repeated the performance with a second passenger on the luggage carrier. A boulevard outfit? Well, well!

AT latest reports from the Pacific coast Jake DeRosier was said to be in the homestretch, and struggling as gamely to offset his disheartening physical handicaps as he ever labored to overcome the obstacles confronting him on a track. This is saying much. DeRosier has written a stirring page into the history of motorcycle racing in America, and it is the hope of all who know him—personally or through his international reputation—that for years to come he may be permitted to rest on his laurels and keep a fatherly eye upon the youngsters who have taken up the hazardous business of record-smashing where he dropped it.

IN another department of this issue a writer on "Alternative Fuels" advances the opinion that few of us ever really have gasoline in our tanks; that we do our put-putting about the country on a form of naphtha that is easier of production and necessarily more plentiful than gasoline proper. Sh-h-h-h! Let us not suggest to the oil magnates that we have discovered anything. They might consider it necessary to give us our fuel in future with a new name—and a new price!

WATCHING MOTOR THIEVES.

FIFTY motorcyclists, headed by C. M. Tucker, a motorcycle policeman, have banded together in the formation of the Wichita (Kan.) Anti-Motor Thief Association.

The Timely Tipster



CONSIDERABLE literary capital has been made of the peripatetic king who, "with twice ten thousand men, marched up a hill and then marched down again," but the uncertainty regarding his destination is little more puzzling than the policy of certain foreign manufacturers of motorcycles and equipment, who devote years to perfecting a motor two-wheeler and then straightway begin to undo their labor by transforming the machine into an automobile. Not long ago I ran across a print of one of these hybrid outfits—a tidy



little English mount, with a $2\frac{1}{2}$ h. kick in its system—and it had been shorn of handlebars, saddle and divers other earmarks of the motorcycle to permit of its being driven from a sidecar! It cut a pathetic figure, the more so because it had evidently been a mighty competent little roadster prior to being placed on the operating

table by the mechanical surgeon.

AT LEAST one British manufacturer is marketing special fittings for driving the motorcycle from a sidecar attachment, and the idea seems to have a hook in popular favor. The mechanism may be turned up for action in about five minutes; off with the handlebars and saddle, on with a few levers, arms and operating connections, and presto! the motorcycle has sacrificed its identity and become merely a power plant for a rakish-looking cyclecar, or monocar. Something may be said for this scheme on the score of comfort, but its advantages appear to stop there. The outfit makes anything but a striking appeal to the eye, and rumple our fast-thinning hirsute thatch as we will, we cannot figure why any motorcyclist able to throw a leg over a saddle should submit to having his mount mutilated into a more or less mollycoddish mess of mechanism, to the end that he may put-put hither and yon without being called upon to balance.

"DON'T make a song of that economy business," advised my pathfinding partner on a recent chatty jog into the country, during which I had been discussing running expense, "for the rider who is continually worrying about the few gallons of gasoline and oil he burns is going to put a damper on a lot of fun."

No doubt about the weight of the latter argument in the abstract, partner, but as a matter of fact few motorcyclists give more than a passing thought to operating outlay, and we never met one who had reached the worrying stage. That's just the point; too much is taken for granted, and many a rider goes through a season without discovering that his mount would have given him better

service had it been run on about two-thirds of the fuel and lubricant actually consumed.

FOR example, I have before me a copy of a letter printed in an English exchange to the effect that the writer, mounting a lightweight with $1\frac{3}{4}$ h. Clement motor, has averaged 180 to 200 miles per gallon of gasoline! True enough, this mount was a skeleton-like little jigger, scaling only about 80 pounds, but its owner states that it took him over the road at 30 m. p. h. on the level, and that he has recently finished a 400-mile tour on it. It should be remembered, of course, that the gallon of our British cousins is really 1.22, or a little less than a quarter of a gallon larger than our gallon measure, but even this does not prevent the performance of the little Clement motor from being regarded as exceptionally good.

HARKING back for a moment to the stunt of throwing a leg over a saddle, we have just looked up from our 4 finger-power Remington to encounter a visitor from Brooklyn, N. Y., who wants to know where he can sign up with a club that does not go in for road incinerating, whose members are content to jog about, enjoying fresh air and scenery, with never a care for speed. Is there such a club in or near New York City? There may be one, but we are unable to name it off-hand. Our Brooklyn friend owns up to forty-two years, and while spry enough and quite enthusiastic, he admits that the time is past when he feels called upon to burn the crown off a macadam road every time he trundles his mount out for a jaunt. In short, he seeks recreation, with congenial spirits of about his own age, and he suggests that a squad of conservative riders—to be known as The Forty-Five Club, for example—would fit into the metropolitan motorcycle field, the "Forty-Five" referring to the average age of the members.

WE believe this suggestion has working possibilities. There are many motorcycle clubs in which forty-five and even fifty-year-old members are enrolled, but as a rule these more sedate riders must accept the road arrangements of the youngsters, or travel alone; there is no special provision for the middle-aged enthusiast. This problem might be solved by forming a club with the minimum age limit at, say, forty years, thus eliminating the speedster. How many motorcyclists in New York City and vicinity would be eligible for such an organization? Are there a



dozen? If so, the Timely Tipster would like to assist in bringing them together.

I NOTE in an English exchange that manufacturers on the other side have of late been rushing their best machines into all kinds of speed and reliability trials, so that the record-breaking mounts, with all the stains of conflict upon them, would be available as exhibits for the big annual shows. Is there a timely tip in this for American show exhibitors? It has been our aim in the past to stage all the new models at their best, trim and spotless, but our British friends appear to believe that the mud-stained testing machines, fresh from road and track, make an appeal all their own. This policy has its limitations, of course, but I have a hunch that many a rider who would give only passing attention to brand new machines, straight from the factory, would linger lovingly beside a battered and grimy steed that has shown its ability to deliver the goods. The other machines in the show stand would no doubt do as well if called upon, but this one—this battle-scarred snorter—actually has put something across, and no rider with a drop of sporting blood in him can fail to do



it homage. After all, there may be something in the idea.

DURING one of the recent heavy rains the Tipster happened to be a member of a party that trickled lugubriously along a northern New Jersey road. There was no suitable shelter, the going was featured by numerous miniature lakes, and in due time my partner's mount developed an aggravating case of belt-slip. 'Twas to be expected, of course; no belt could be blamed for slipping under the circumstances, but it was none the less irritating. Eight miles from home we encountered a rider with tire trouble and stopped to extend a helping hand—or several of them, if necessary. Learning of my partner's belt-slipping difficulty our new friend dug down into a capacious tool-bag and brought to light some fuller's-earth which he sprinkled liberally on the greasy belt. It was a simple little wrinkle, but it turned the trick, for the belt gave practically no trouble on the remainder of the trip. Fuller's-earth absorbs grease and is therefore a mighty valuable addition to an emergency kit for wet-weather going on belt machines.

WHILE this is not a brand new belt tip, it is one that will bear recalling at this season, when belts are likely to be hard put to hold the pulleys over muddy and snowy roads. I have seen experienced riders use

common earth, and even sand, to assist their belt in gripping, but for obvious reasons these should not be resorted to except in extreme cases. Sand in particular has a ruinous effect on both belt and pulleys, and even when fuller's-earth is used the belt should be thoroughly cleaned as soon as possible after the rider reaches his destination. Speaking of belts, I saw a rider make a neat splice recently with a piece of common hemp rope. His V-belt had parted, and upon being spliced it proved to be too short. No extra belt connector was available, so the hemp rope was called into service. It pulled well, too, and the crafty rider avoided the ignominy of being towed home.

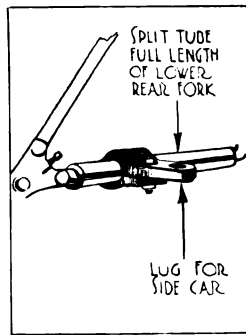
A FEW days back the Tipster figured in some tipping that was not on the program, and the why and wherefore will probably interest some of the boys who are inclined to experiment with sidecars. I had commandeered the sidecar outfit of a friend and was nursing it quite gingerly along a suburban road, driving from the car, when a long clear stretch tempted me to open up a notch or two. This stretch ran into a fairly sharp left turn, and the bus was barking along vigorously when we struck it. Well into the turn—and with little or no warning—the sidecar evinced a desire to stand up on its nose, so to speak, and in another second the driving wheel of the motorcycle was off the ground, doing its prettiest to churn itself out of the frame. An instant later we were back on the road, having avoided a spill, but that unexpected kick-up of the driving wheel is not recommended for riders at all inclined toward neurasthenia.

IT was all simple enough, despite its originality. When the turn to the left was made at fair speed my weight in the sidecar was thrown toward the foot of the attachment and slightly outward, and there being no weight over the driving wheel of the machine, this part of the outfit promptly flew into the air. The tipping tendency on the part of the sidecar was accentuated by the fact that I was leaning forward. That yours humbly was not draped unceremoniously over a nearby barbed-wire

fence was entirely a matter of luck; the good judgment did not figure until we snailed our way back to town and turned the outfit over to its owner. Driving from the sidecar is not such a risky performance, but then there are corners—and corners, and figuring weights and angles on a turn is not always the simplest of tasks.

WHILE I am on the subject of sidecars—a topic of rapidly growing interest, by the way—I want to pass along a wrinkle that came to my attention on the road some time ago. I have heard quite a few of the boys complain of the side stress exerted on the lower rear fork member of the machine to which a sidecar is attached, and at too frequent intervals breaks in this part have been reported. The owner of the machine recently observed had split a piece of ordinary frame

tubing 12 or 14 inches long, and had placed it around the lower rear fork tube, thus affording a bearing of double thickness



where the sidecar lug was attached and distributing the strain. The rider—who has a wide reputation for daring road work—stated that this simple and inexpensive precaution had relieved him of trouble and had permitted him to put his outfit through heavy going that would probably have damaged the machine had the sidecar lug been fastened to the bare tubing.

ALLEGHENY OFFICERS.

AT the December meeting of the Allegheny (Pa.) Motorcycle Club, which was held in the new clubrooms, the annual election took place, resulting as follows: A. V. Lurdell, president; J. B. Cotts, secretary; William Maire, treasurer; Michael Morgan, captain, and Lee Darney and Elmer Reuthmiller, lieutenants. Chairmen and members were appointed to serve on the following committees: By-laws, R. H. Hendrickson, Frank Hoffman and Dr. Baker; House and Rules, Charles Tesner, C. C. Knight, Frank Brasecker, Harry Geisey and E. J. Krause; Publicity, R. E. Brown and O. S. Logan; Entertainment, S. Zeyhel, John McCoy, Wilbert Lupton, A. W. Stark and J. Flanagan; Membership, every member his own chairman; Racing, C. F. Seitz, H. Russell Geisey and Walter Poffifer.

SHOP REGISTRATIONS.

F. A. M. repair shops to register during Thanksgiving week are reported as follows: Redmond's Cyclery (L. O. Redmond), Lindsay, Cal.; W. A. Park, 1512 Eighteenth street, Bakersfield, Cal.; Schenectady Welding & Repair Shop (Edwin Sharp-ley), 509 Union street, Schenectady, N. Y.; Brown Music Company (R. B. Cunniffe), 9119 Commercial avenue, South Chicago, Ill.; Charles B. Jansky, 623 North Vandeventer avenue, St. Louis, Mo.; renewal. Mount Morris Motorcycle Garage (Gus Rotholz), 1491 Fifth avenue, New York City.

AMONG THE MISSING.

A 1913 "5-35" Harley-Davidson was recently stolen from Harlan Hutson, of Minneapolis, Minn. The machine is equipped with 2 3/4 Goodyear tires and a Troxel saddle, and the engine number is 145-C.

C. S. King, 921 Ashland Boulevard, Apartment H, Chicago, reports the theft of his 1912 model Harley-Davidson; motor No. 5281-B.

A 7 h. twin Excelsior, of the 1913 type, belonging to W. S. Farnsworth, sporting editor of the *Atlanta Georgian*, was recently stolen from in front of the office in Atlanta. The motor number is 38485, and the Georgia license is No. 17896. The machine was fully equipped and had a tandem attachment. It is announced that a reward will be paid for its recovery.

NEW PENNSYLVANIA HEAD

H. Wilfred DuPuy Succeeds Herbert DuPuy as President of Big Tire Company—Other Officers Remain.

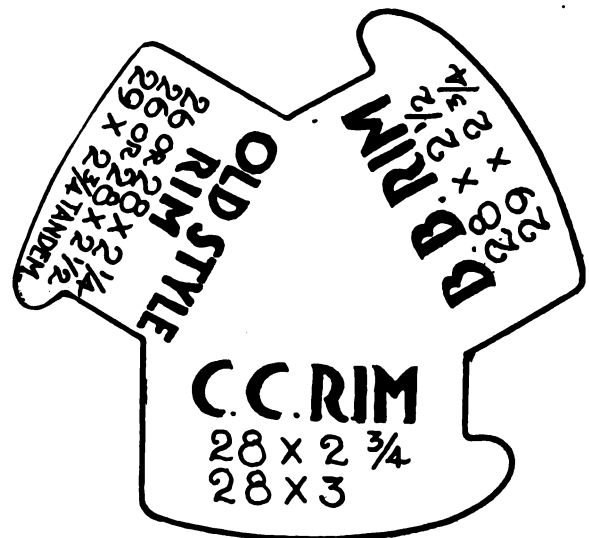
AT the recent annual meeting of the Pennsylvania Rubber Company, Herbert DuPuy retired from the presidency in favor of H. Wilfred DuPuy, who was elected to that office while still continuing as treasurer of the company. The new office of chairman of the board was created, to which the retiring president was elected. The following officials were re-elected: Charles M. DuPuy, vice-president; Seneca G. Lewis, general manager; George W. Shively, secretary; Charles G. Morrill, assistant treasurer. Herbert DuPuy for some time past has been unable to take an active part in the management of the company on account of his increased responsibilities as chairman of the Board of Directors of the Crucible Steel Company of America.

The readjustment of offices involves no change in the general conduct of affairs. The company's policies, which have proved so successful in the past, will be carried on with the same consistency and energy.

Contracts with distributors now in hand assure an increase for the year of 100 per cent. over the business of 1911. Judging from the tremendous interest aroused by the company's recent announcement of a new process of oil-proofing the rubber used in Vacuum Cup tires, the volume of business for the coming season will develop at a still swifter rate. In fact, the entire production at prevailing capacity is already sold for the ensuing year, practically all the leading jobbers throughout the country having placed orders.

MOTORCYCLES REPLACE HORSES.

AS a result of a recent epidemic which destroyed many horses, the farmers in the vicinity of St. Joseph, Mo., have purchased motorcycles for inspection work and trips to and fro over their farm lands.



ABOVE is shown an outline of the new Goodyear rim gauge, which is designed to simplify the fitting of tires to the new rim types. As the exact sizes have been followed in preparing the illustration, dealers may cut it out, paste it on cardboard and thus make an emergency gauge.

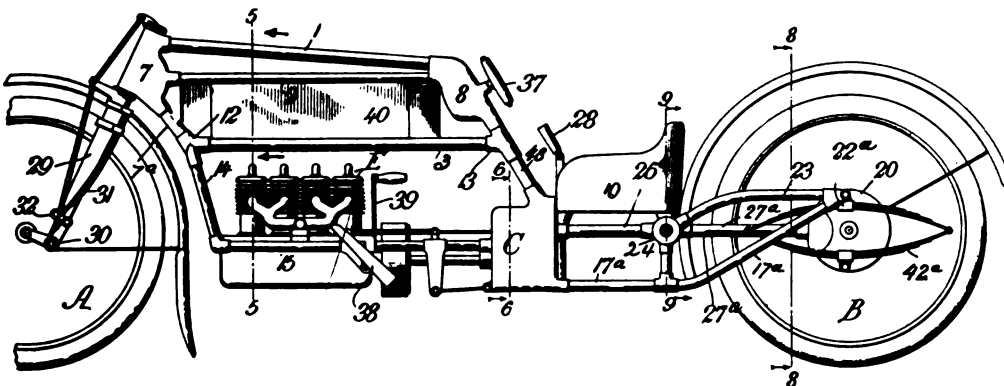
PATENTS

Two New Frame Types;
Springing Devices; an Ana-
tomical Saddle and a Novel
Muffler Design.

STRIPPED OF HANDLEBARS.

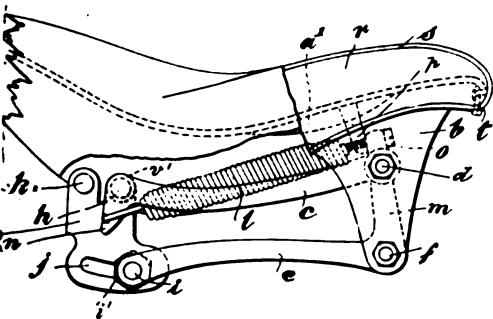
A LLEN A. HORTON, of Detroit, Mich., is the patentee of the shaft-driven type of motorcycle shown in the illustration. It features a novel springing system, particularly as regards the rear construction, and embodies numerous other distinctive details. No handlebars are used; the tubing part 2, located almost directly below the upper frame member 1, serves as a sheath for the steering rod (not shown) which connects the steering handle 37 with the front fork. The rear members 17a and 23 make up the rear forks and are connected to the shackle of an elliptical spring on either side of the wheel.

The chamber C is intended for the housing of variable gears of any desired type, with the understanding that they will be actuated by the lever 28. A footrest is shown at 38.



AN ANATOMICAL SADDLE.

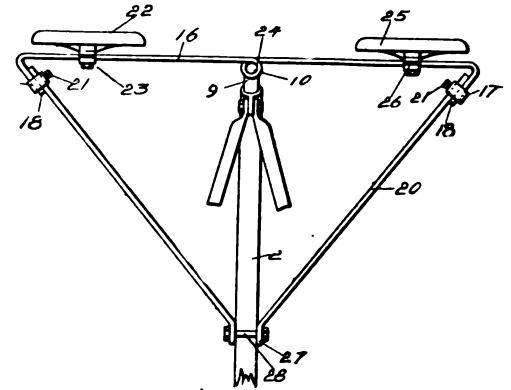
IN the accompanying diagram is shown a new type of motorcycle saddle, recently patented by Timothy Shepherd, of Birmingham, Eng. It has an anatomically shaped seat proper, which has been designed from plaster casts taken from average men when in a sitting position, and in this direction



it is claimed to meet the requirements more nearly than any seat heretofore offered. The springing of the saddle is comparatively simple. When a downward pressure is exerted upon the rear of the saddle the arm e moves forward and the springs l are called into play.

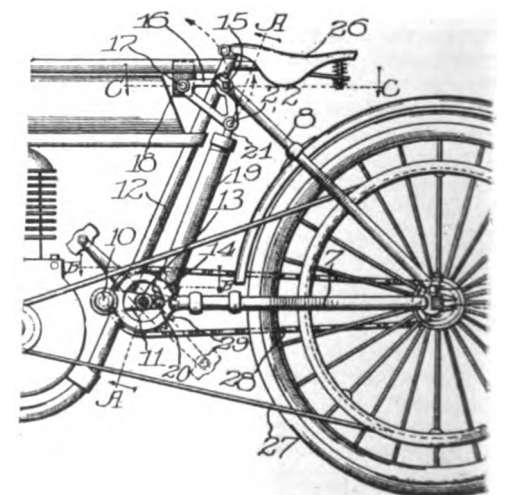
SPECIAL PRIMING PLUG

A NOTHER recently issued patent, of interest to motorcyclists and all users of internal combustion motors, covers a spark plug with a special device to permit of injecting a priming charge. It is the invention of Robert A. Stranahan, of Toledo, Ohio. Into the ordinary shell of the plug the priming device is screwed and when it is desired to prime the motor a cap is turned to uncover a priming hole, and to unseat a valve, and the gasoline is then introduced into the nipple from which it passes to the motor through a bore or passage in the shell of the plug. Through this action the priming charge is brought into the cylinder in close proximity to the electrode terminals. When the primer is not in use the valve is seated so as to prevent any leakage during the running of the motor. With the season of cold weather at hand this is a plug im-



A SHOCK-ABSORBER

IN the accompanying illustration is shown a new type of shock-absorber for motorcycles, recently patented by Ambrose B. Anzi, of Trinidad, Col. The rear fork 7 is pivotally connected at 10 to the fitting 11, which is rigidly fastened to the upright seat-mast tube, and the fitting 11 also forms the bearing for the crankshaft 13. The lower rear fork is looped at 14, near its forward end, to avoid interfering with the crankshaft and to permit of free action of the joint 10. The upper rear fork is pivoted at its upper end, and between the mechanism engaged here and that incident to the pivoting of the front end of the lower fork is a cylinder 18, closed at both ends, and pivotally connected at 20 to the fitting 11. A rod or plunger 21 extends into this cylinder, its upper end being pivoted at 22 and its lower end engaged with compression springs housed in the cylinder so that both shock and rebound action is taken up. The action of the load carried between the wheels is to cause the rear fork to swing upward, buckling the toggle brace 8-16, and this buckling is resisted by the upper compression spring in the cylinder, thus permitting the shock to be taken up. When the rear wheel assumes its normal position the other compression spring is called

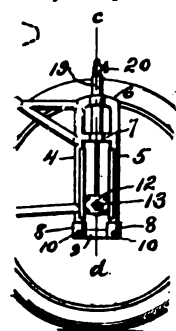


provement that should earn more than passing attention from motorcyclists.

FITTING TWO SADDLES.

IN order to provide an attachment which will permit of two persons riding side by side on a motorcycle and occupying separate saddles, William H. Bradley, of Portland, Ore., has designed an entirely new type of "sociable" fitting, as shown in the diagram. Running at right angles to the standard seat-post, and making a loop around the horizontal bar of said post, is a double bar system which extends for a convenient distance on either side of the central seat-post and is then turned sharply downward to clamp both its ends around the seat-mast tube as shown at 28. The two bars in the upper arrangement end in a triangular clamp at 17 and from that point a single bar is carried to the seat-mast tube for bracing purposes. The saddles are placed as shown, on the upper horizontal bars, a favorable bearing being provided because of the fact that two of these bars are enabled to carry the saddle weights. The saddles may be moved to or from the main seat-post to suit the convenience of the riders.

into play. When riding the motorcyclist is virtually supported on the main compression spring, though the action against the latter really is upward.

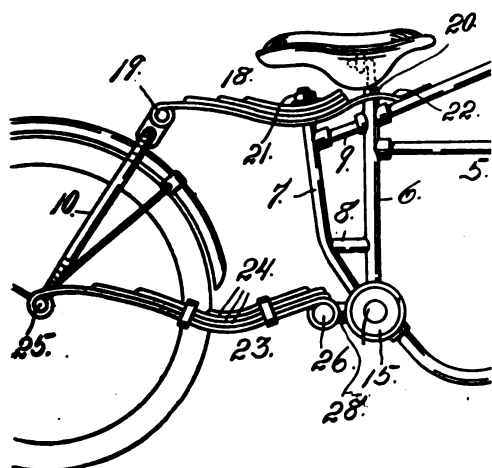


**THE
REDNER
SPRING
AXLE**

A SPRING AXLE

A SPRING axle for motorcycles is illustrated herewith. It is the invention of Webster E. Redner, of Kansas City, Mo., and is operated telescopically through the use of pistons and coil springs. Two dash pots (19 in Fig. 2) are supported by arms of the upper rear fork, and these house two plungers 21, the lower ends of which are secured to the bearing members of the rear axle. As the rear part of the frame moves downward the springs 17 are acted upon, but the downward movement is resisted by the air which is thus compressed in the dash pots 19. By the same token a sudden movement in the opposite direction is also resisted, the plungers in this instance being assisted by the coil springs 18.

The arms of the front fork are constructed similarly to those of the rear fork, and the same shock-resisting principle is called into play. An upward movement of the front wheel acts upon coil springs, and here again the action is resisted by the compression of the air in dash pots. As the wheel assumes its normal position on the road the downward movement is softened by the compression of the air beneath the plungers and the movement is further cared for by lower coil springs, as in the rear springing system.



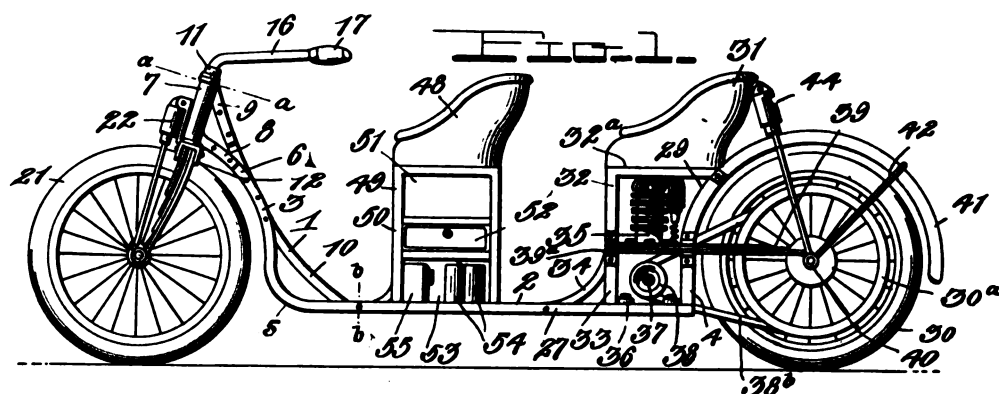
UNIQUE SPRING FRAME.

WHAT may be regarded as very nearly the limit of originality in rear frame springing for motorcycles is shown in the ac-

companying illustration, which presents a design for which Charles G. Stephenson, of Denver, Col., was recently granted a patent. Stephenson connects the rear frame section with the main frame by leaf springs as indicated, and argues that all vibration must thus be eliminated. The lower springs in this arrangement take the place of the ordinary lower rear fork members, connecting the rear axle with the main frame bearings, while the upper springs are intended to connect the upright rear fork with the seat-mast tube of the machine. The inventor points out that either the upper or lower springing system may be used alone, but for maximum resiliency he recommends the adoption of both sets of springs. That the general arrangement would develop divers drawbacks in extended service would seem to be a natural expectation, and the design is reproduced chiefly because of its radical departure from accepted construction.

NEW FRAME CONSTRUCTION

EDWIN O. HIMES, of Albion, Ind., is the inventor of a new type of motorcycle which departs from accepted construction at almost every point, as is indicated in the accompanying diagram. The Himes machine carries two "bucket" seats and of necessity embodies a highly original form of frame. The latter in the main comprises a pair of L-shaped steel bars, that are upturned in front to meet the head-piece, and sharply upturned in the rear as shown at 4. The rear seat 31, is sup-



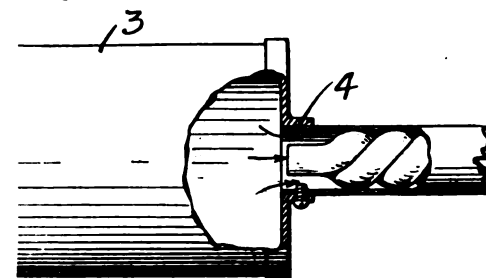
ported partly by the upturned rear portion of the frame, and partly by the frame 32, the front leg sections of which are fastened to the side-bars 2. The motor 35 is mounted under the rear seat, its base being bolted on the side-bars 2. It will be noted that the drive is by a short belt to the rear wheel.

The rear frame construction also embodies a spring feature. Leaf springs 39 have their front ends fastened to the outer sides of the rear frame bars and their rear bearings are afforded by bearing eyes 40, in which the spindles of the rear wheel are mounted. Both front and rear wheels are provided with pneumatic shock-absorbers, indicated at 22 and 44. The inventor does not dwell upon the construction of the motor in his patent papers, and it would seem that considerable mechanical juggling would be required to adapt a standard motorcycle power plant to the requirements of the proposed outfit.

Under the front seat is the gasoline tank 51, a tool compartment 52 and a lower compartment 53 in which may be carried batteries and a coil. As the description lacks numerous details essential to the practical operation of such a vehicle it is assumed that the inventor aims only to deal with the frame construction, which in itself is radical enough to be interesting.

SPIRAL EXHAUST TUBES.

IN the accompanying illustration are shown sections of the expansion chamber and the exhaust pipe in a muffler recently patented by Joseph M. Michaelson, of Minneapolis, Minn. The gases are conducted to the expansion chamber in the usual manner, and here cooled and expanded somewhat before passing into the spiral tubes which are enclosed in the dis-



charge pipe. It is the contention of the inventor that the gases passing through these tubes and being subjected to a spiral motion will be cooled to such an extent before reaching the open air that there will be little or no noise. The length of the exhaust pipe and the number of coils in the inner spiral tubes may be varied to suit the types of motor for which the muffler is to be used.

SIMPLE SPRING FORK

STILL another type of spring fork for motorcycles is the invention of Samuel R.

Ridgway, of Birmingham, Eng., and indicates comparatively simple construction. When the front wheel is moved upward by a road shock a lever is so pivoted that the main spring is compressed toward the steering-head and the jar thus absorbed.

BIG DEMAND FOR VANS.

CONSIDERING the fact that the season of snow and heavy roads is at hand, there is a remarkable demand for sidecars, according to late reports from the Majestic Mfg. Co., of Worcester, Mass., and this company has received a dozen telegraphic orders for its new model commercial vans during the last two weeks. Inquiries from all parts of the country indicate that interest in the commercial vans is spreading rapidly and the Majestic company looks for big business in this line.

MINITER TO SELL RAYFIELD.

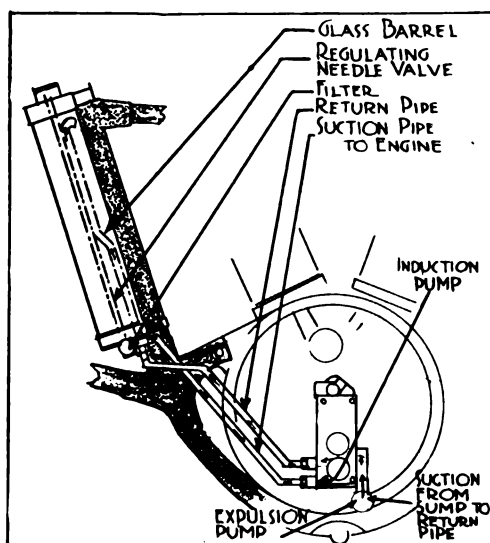
N. H. MINITER, who for several years has been sales manager of the Stromberg Motor Devices Co., has resigned his position with that concern and is now associated with the Findeisen & Kropf Mfg. Co., of Chicago, as factory sales manager. He will in future handle the Rayfield carbureter.

ENGLISH NOTES

By "BRITISHER"

English Advances in Lubrication; Three Systems That Embody Novel Features, and the Outlook for Others; New Types of Pistons to Minimize Carbonization Troubles in Cylinder.

TWELVE years ago motorcycles and automobiles were all lubricated in exactly the same way. Oil was pumped into the crankcase at the driver's judgment, and was distributed over the engine by the flywheels, the less accessible bearings depending on little holes and traps, which received a certain percentage of the flying lubricant, and allowed it to drip into grooves scooped on the inner periphery of the bronze bushes.



Circulating System of Oiling.

In the last decade practically every automobile designer of any standing has scrapped this very haphazard system. It put an engine at the mercy of any duffer who happened to be driving it; regular lubrication, with so primitive a system, really required the chauffeur to keep one eye glued to a speedometer, and even if he observed the five-mile or the twenty-five mile intervals recommended by the maker of his motor, the lubrication was far from perfect.

From Extreme to Extreme.

FOR a brief period immediately following the injection of a dose of oil the engine was flooded with an excess of the lubricant; during this period the sparking plug would often soot up, and a certain per-

centage of oil would find its way past the rings, soil the valves and adhere in a carbonized form to the piston-head and the walls of the combustion chamber. To this period of repletion there succeeded a short period during which the supply of oil in the crankpit was roughly accurate, and finally, as the moment for the injection of the next dose approached, the quantity of oil in the base-chamber became too scanty, and the danger of seizures or scraped bearings became imminent.

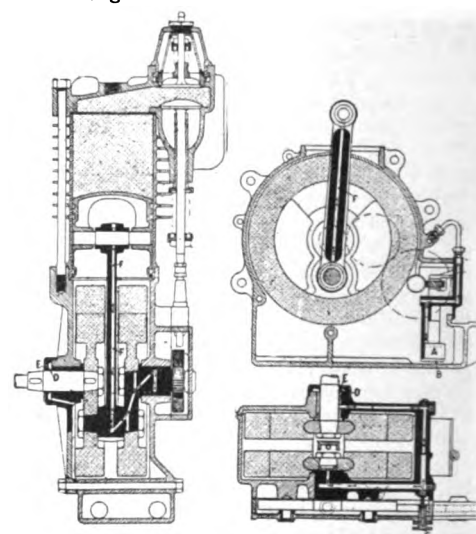
The unsatisfactory nature of this oiling system was further affected by the fact that a headwind, a dirty gauze on the air intake, the presence of extra passengers on the vehicle, the heaviness of the road surface, gradients, the condition of the compression joints, etc., etc., all called upon the driver to vary either the size of his oil injections or their frequency. As an inevitable consequence, ninety-nine drivers out of every hundred oiled too much or too little.

Results of Improper Oiling.

IN the first case, an engine soon got into a filthy condition, and its power oozed away; supercompression began to make its symptoms evident, and the engine had to be disassembled and cleaned. In the latter case, the bearings were soon badly worn, and expensive repairs became necessary; in extreme cases engines were wrecked and ruined. Consequently, some improved system would soon have been developed in any case. But the demand for extracting higher efficiency out of any given size of engine made the problem far more acute.

Engine speeds rose, and engine temperature increased, so that the interior parts of an engine ceased to be covered with liquid green

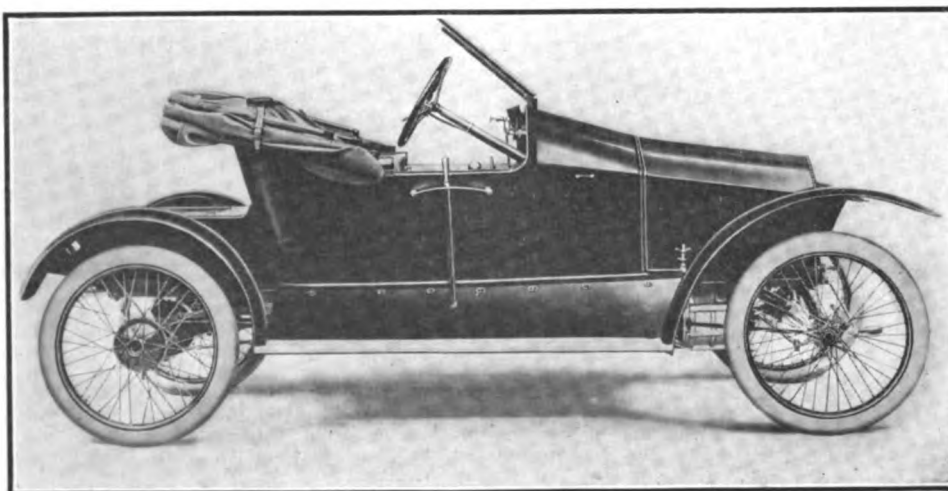
slime, dripping gently into its appointed channels, and instead the inside of an engine was full of an "oily fog," which could not be relied upon to penetrate minute channels by mere force of gravity. In addition, the increased efficiency of the engines vastly raised the stresses on the bearings. As a consequence handpumping and splash-distribution has long since vanished from high-grade automobile engines.



Lubrication of W. & D. Motor.

The Most Dependable Systems.

THE best modern systems consist of a mechanical pump, which forces oil along myriads of minute channels to every part of the engine which needs lubrication; the crankshaft is often hollow, and conducts a stream of oil under pressure to each bearing; each connecting-rod big-end dips into a trough of oil, kept at a constant level; a tiny tube runs up each connecting-rod to oil the wrist-pin; the oil is filtered at least once on each circuit on the engine; provision is made for the rapid extraction of the filter, in order that it may be cleaned regularly; the lubrication is adjusted to engine loads by devices which increase the bulk of the oil stream in proportion to the throttle opening; and in the latest practice the oil is actually circulated!



A Representative English Cyclecar, the Humberette.

through a small radiator, which keeps it cool.

Without such complex refinements the present world's automobile records could never have been made. It is these systems which enable a big car to average close on 70 m. p. h. for two days in a Grand Prix race, and which have rendered possible the six-hour record on Brooklands track, England, with an 11 h. engine running at over 60 m. p. h. the whole time. In spite of these precautions, coupled with great increases in bearing designs and in huge advances in metallurgy, it is no uncommon thing for a bronze or ball bearing to seize in such races, or for a babbitt (white metal) bush to liquefy.

Motorcycles vs. Motor Cars.

YET the motorcycle remains practically unaffected by the development of car lubrication; 75 per cent. of the world's motorcycles still depend on the old handpump and splash system. As a consequence, the average motorcycle engine requires rebushing after a mileage which any automobile maker would consider ridiculously brief; motorcycle engines call for decarbonization every 1,000 miles, whereas car engines will go through a season uncleaned; and serious engine troubles are far more common on cars than on cycles.

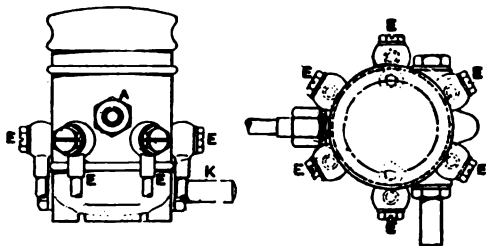
Tokens of Progress.

THERE are, however, some indications that motorcycle designers are waking up. It may be questioned whether the experiences of amateur road riders are the impulse behind the discontent. More probably the popularity of racing advertisement and the strenuous rivalry between different factories in the direction of world's records is the real lift behind reform. Two simple types of mechanical lubrication have at last acquired a certain popularity on stock roadsters. One is the mechanical pump, utilized on several American machines.

When this is properly made, so that it functions reliably, and its pressure does not drive oil out through all the crankcase joints, it is certainly an advance. If it is correctly adjusted it saves the rider from continually watching his speedometer and racking his memory to decide when he last injected a charge. It goes far towards maintaining a constant level of oil in the crankcase under normal conditions. Where it fails is that it adjusts the oil supply to *engine speed*, instead of to *engine load*.

Defects of Mechanical Oiling.

ITS defects are obvious, when we reflect that it feeds exactly the same quantity of oil when

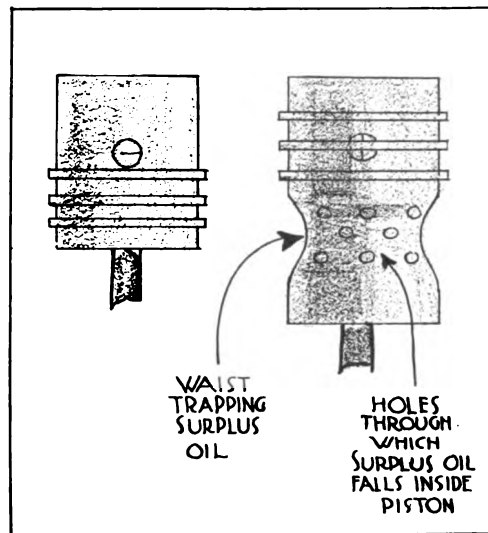


The Bosch System; Note Pumps E.

the engine is throttled down to round a street corner at walking pace, and when the engine is slogging up a precipitous grade with the throttle wide open, and the spark retarded. The retention of an auxiliary handpump is therefore essential, and responsibility is still laid upon the driver; if he is careless, he may

fail to notice that his mechanical pump has gone on strike, and he may fail to supplement the fixed feed with his handpump when the engine is laboring at a low road speed. If on the contrary he is nervous, he will overdo the handpump business. So this type of oiling cannot be regarded as more than a temporary makeshift.

In Great Britain a similarly faulty system is preferred to the mechanical pump supplying a splash feed. British engineers dislike the engine complication introduced by placing a small pump in the crankcase, and they dislike the fact that the pump and its operation are



Two New English Piston Types.

out of sight, leaving the rider to guess from the behavior of his engine whether the pump is in order or not; as weak running might be due to a hundred other causes, over lubrication is bound to result when the rider unjustly suspects his forcepump; while a duffer may not notice the derangement until serious injury has befallen the bearings. Consequently, British makers prefer the sightfeed drip.

A Standard English Type.

A COMMON type operates as follows: On the top of the tank and well forward towards the steering-head is mounted a glass dome containing an adjustable needle-valve. This drip-valve is supplied with oil by a handpump of the ordinary type with an automatic two-way valve at its base. The pump-handle is pulled up by the rider and left up; a spring above the pump piston forces it relentlessly down against the resistance of the thick oil attempting to enter the tiny needle-valve. The dripping oil in the glass dome is clearly visible to the rider, and the rate of drip is adjustable.

This system has the merit of being simple, reliable and visible, but it suffers from an aggravated form of the weakness which characterizes the mechanical pump. The mechanical pump varies the oilfeed to suit engine speed, if it ignores engine load. The dripfeed never varies of its own accord. Responsibility is therefore still thrown on the rider, who must open the needle-valve a trifle to cope with adverse conditions of a prolonged kind, e. g., twenty miles against a headwind, ten miles of climbing, cloggy roads, etc., etc.; in some cases a bypass tap cuts out the drip at the rider's will and enables a full charge to be instantaneously injected.

These systems are coarse and clumsy com-

pared with automobile designs; moreover, for reasons of space the size of motorcycle bearings has rather been reduced than increased to meet the extra strains of the modern engine with its high efficiency.

An Advanced Design

AMERICAN readers may be interested in two advanced designs exhibited at the British Olympia Show this month; they are straws which show in which direction the wind is blowing. The first illustration describes the W. & D. engine, and it is remarkable to notice that this is probably the only engine in the world which has a spotless crankcase; not one single green smudge ever defiles its joints, and it is further the easiest engine in the world to start, because its flywheels have not got to plough through a sea of congealed and soggy lubricant.

A rectangular sump is cast on the bottom of the crankcase, which has no joint below the oil-level; there is a coverplate on one side sufficiently large to permit flywheels, piston and cylinder to be withdrawn, leaving the base-chamber still fixed to the frame of the machine. At the front end of the crankcase a pair of skew gears drive a vertical pump spindle; the pump consists of two gearwheels, which rotate in the oil lying in the sump.

Operation of the System.

THE oil first enters a large filter (readily removable for cleansing), and when filtered enters a distribution chamber, provided with a valve which regulates the pressure. Out of this distribution chamber leads proceed to the vital parts of the engine. Leads go to each of the crankshaft bearings; that on the pulley side ends in a stopwasher, which returns all excess of oil into the sump, where the pump commences to recirculate it. That on the timing gear side has a circular oil groove, terminating in the crankpin, and the crankpin lead ends in a tiny tube firmly attached to a recess in the side of the connecting rod, up which oil ascends to the gudgeon-pin.

Novel Piston Designs

THE two appended cuts show endeavors made to prevent excessive carbonization of the combustion chamber. One plan is very simple and quite efficient. It takes the simple form of mounting all three rings below the gudgeon-pin; their pressure sweeps the cylinder walls clear and prevents temporary excess of oil from rising high enough to enter the combustion chamber. On paper it looks as if the idea would cause underlubrication of the upper areas of the walls, but in practice no such effect is perceptible.

The Bosch Device.

THE Bosch Magneto Co.—who never coquet with rubbishy notions—have brought out a pressure oiler. It consists of a metal cylinder, with detachable top, designed to be mounted either before or behind an engine (like a magneto), and to be rotated in either direction by chain, gears or worm shaft after the fashion of a magneto. The stub projecting shaft, which takes the drive from the engine, operates by means of a worm and central shaft at right angles, which carries cams; these cams actuate the plungers of six small pumps, each with a separate outlet pipe or lead. The cylinder is supplied with oil by a pipe from the standard tank.

TIPS *And* TOPICS



USING a machine with a sidecar involves several departures from solo practice. In the first place, when the sidecar is first attached it should be driven with a passenger in it, and the carbureter adjustments then made. A sidecar attached to a motorcycle means less mileage per gallon, as a richer mixture will be necessary at all speeds, and on climbing hills the difference in consumption will be most noticeable. Personally, I would rather climb hills than ride on the level, and my ideal riding country would be a series of hills with short level stretches between, with a return over a long zig-zag road like they have in the Alps. But to return; be careful to adjust the mixture with the sidecar on and weighted with a passenger, and include a good stiff hill in the run for adjustment.

The Steering Head.

AFTER each day's use of the car outfit, lift up by the handlebars to see if there is any play or shake in the steering-head. You will occasionally find some, and *then* is the time to set up on the cones or bearings. Follow a systematic procedure from the steering-head, somewhat as follows: Forks, front sidecar fitting, intermediate sidecar fittings, rear sidecar fitting, clips on sidecar frame, chair springs and fastenings, breaks in the rattan, cane, etc. Wire up any of the last, using galvanized wire, unless you are a "boulevardier," when ordinary iron wire will do. One of the saddest sights is the sidecar whose chair is absolutely "fuzzy" with ends of cane and patched upholstery.

An Immortal Product.

THERE is a case within a mile of my desk where a sidecar has changed hands three times since August 1, not because of its being poor, but by reason of each successive owner having a smash-up, badly disabling the motorcycle, but hardly even bending the sidecar frame. There is no mark of any kind on the sidecar, and the original owner came to me to find out the name, as it is an imported model. Being without advertisement, it nevertheless is eagerly sought by a fifth rider, who swears that he will not get smashed up with it attached. It is fondly known as the "Killer," as it has been used on four different makes of motorcycles.

Carbureters on Twins.

ANUMBER of riders throughout the country seem to have trouble with the running of their big twins, if their letters are to be judged. I find this is very rarely the case with the rider of a mount whose manufac-

turer fits his own carbureter to his product, but the others say they cannot get the right mixtures except in a small range of speeds. Some of these riders write their letters suggesting larger carbureters as improvements for twin motorcycles, so that there must be something in the grumbling. One rider complains of not being able to get enough air beyond 45 miles per hour, without the aid of an auxiliary air-cock. Another cannot get speed without changing the level of gasoline in the float chamber, and the motor chokes up with too much gasoline when running slowly.

IS THIS trouble up to the makers of machines or to the carbureter folk? To answer this question in each case is merely to guess, and if I take my own experience, I might do injustice to both. On a twin that takes me about the country there was a carbureter and also an air-cock fitted as "regular equipment." The combination was poor, and I obtained an adjustmentless carbureter with no springs or "trimmings" to twiddle. The place of the air-cock is now occupied by a grub-screw, and the consumption has been cut down 15 per cent., with good mixtures from a crawl to the maximum speed possible with the mount. Still, I cannot advise riders to put on this make unless the old one is unsatisfactory, as the cost is pretty steep. But if riders will shout for any necessary change in equipment, they will get it, provided shouting is strong enough.

Single and Sidecar.

QUITE a number of inquiries have come in asking whether a sidecar can be used with a single 4 h. machine, fitted with clutch only. The latest refers to sandy country with steep hills, and I am afraid that short of plenty of clutch manipulation and an occasional "dropping the passenger" progress will not be smooth. Of course, if the grades are moderate, the outfit and passengers can get along with clutch manipulation only, but this has a bad effect on clutches and generally tends toward that unhappy state of affairs

known as a "permanent free engine" when the clutch goes on strike. In a good road section the 4 h. single will take a sidecar anywhere except up abnormal hills, without shedding the passenger. A 5 h. motor or bigger would be better, I think, but with proper gearing it is surprising what a single 4 can be made to do.

Gearing.

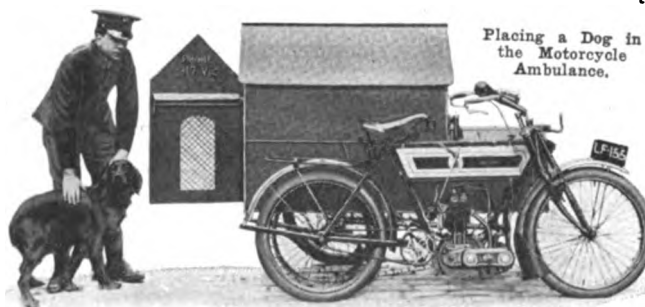
IT is rather difficult arbitrarily to set a gear ratio for a sidecar outfit of this kind, but I have found that about $5\frac{1}{4}$ or $5\frac{1}{2}$:1 will do the trick in ordinary give-and-take country. A 6:1 gear will work on some machines and not on others, sometimes causing overheating, but the lower the gear the easier will the hills be climbed. And also, the slower will the speed be on the level. Right here there is a kick coming about fast driving with a sidecar.

What Fast Driving Does.

THERE is not a motorcycle for solo work that is really meant for use with a sidecar, and it speaks well for our motorcycle makers that there are so few strained frames, etc., due to the use of such passenger-carrying devices. The strains and breaks come from two causes: improper attachments and speed mania. The average sidecar owner drives like Sam Hill as soon as he gets clear of traffic and the police, and the twisting of the sidecar frame in relation to the motorcycle has to be taken up by the rear forks and down tube chiefly. The result is that these parts are askew after a short time, and the tires run on one side of the tread, which is very fine for the tire-makers but hardly desirable for the rider or owner. I can speak feelingly as a passenger over rutty roads and cobbles, and never did take delight in watching nuts come off the bolts. There are other little things that are affected by fast running with a sidecar, but I have noted only the most serious, which includes also the breaking of a connection and the resulting smash-up of the outfit and passengers.

MOTORCYCLE DOG AMBULANCE.

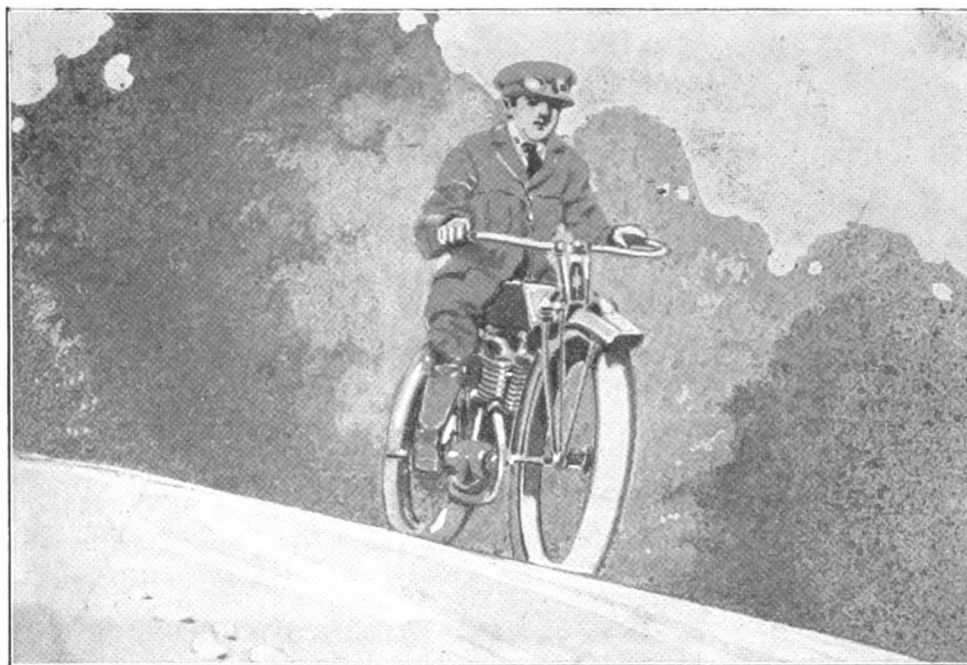
IN the photograph is shown a novel motorcycle outfit which often attracts attention on the streets of London, Eng. It is used as a sort of "ambulance" for transporting sick or injured dogs to a hospital which is set aside for their treatment. The hospital attendants make regular rounds of the city, and are also prepared to answer special calls with their motorcycle ambulance. The idea is one that has met with favor in several European capitals. There is no reason why it shouldn't "go" here.—*Popular Mechanics* photo.





DAYTON

Announcing The 1913 **DAYTON**



Some time ago it was given to the public that we would enter the motorcycle field and produce a machine to be known as the DAYTON.

From the inception of our idea until the present day, we have worked faithfully to produce a motorcycle that would be a credit to the far-famed Davis Reputation.

America's foremost motorcycle engineers have approved every line and every detail of the DAYTON. By countless road and laboratory tests it has been tried and found up to the mark of perfection.

The DAYTON is a **new** Motorcycle, but it **is not** an Experiment. We have gathered the best motorcycling talent in the country and united it with our manufacturing ability, mammoth plant and almost unlimited resources. There is every reason why the DAYTON is destined to maintain a firm place in the motorcycling world.

We entered the field determined to consider the Rider's Needs not met by motorcycles in general. We felt the public's pulse and learned what was wanted. The enthusiasm with which the DAYTON has already been met by riders and dealers, is proof positive that we are right.

Knowing that the DAYTON is worthy, we are content to abide by your judgment.

THE DAVIS SEWING MACHINE CO.
DAYTON, OHIO

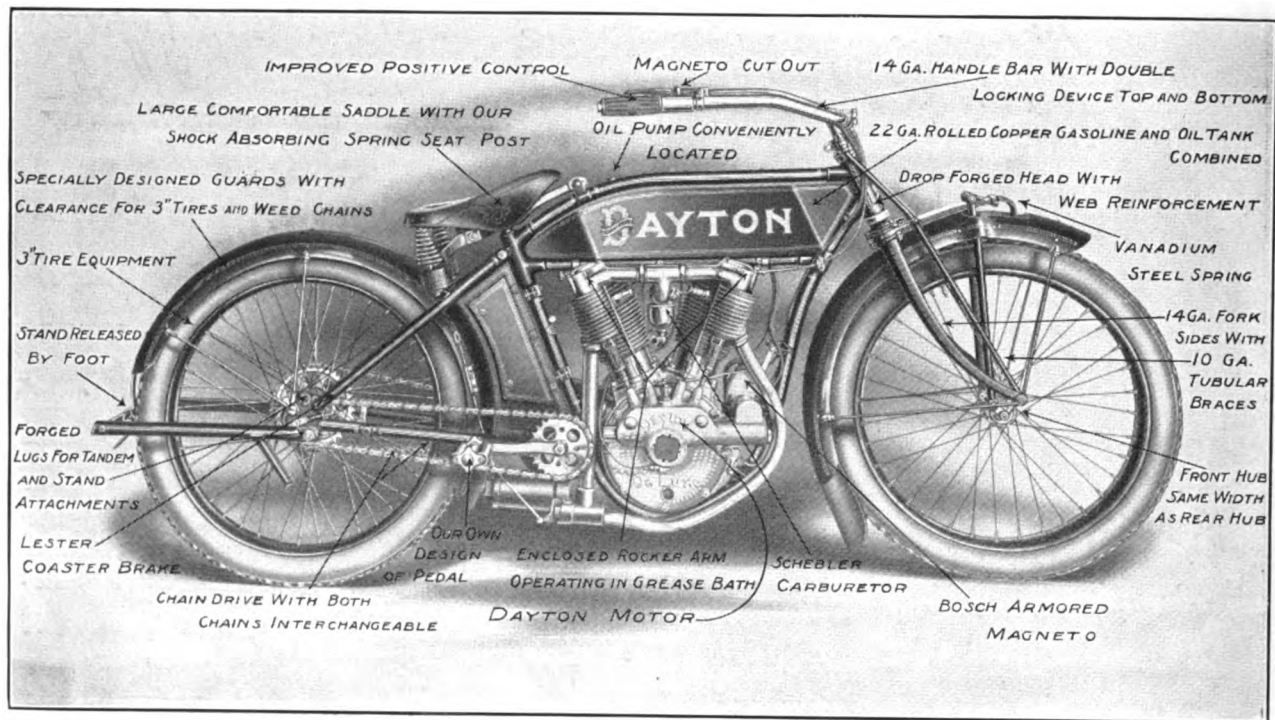


DAYTON

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.



DAYTON



SPECIFICATIONS

Motor	DAYTON 7 H. P. Twin: Bore 3.25 in., stroke 3.67 in., displacement 60.92 cu. in. DAYTON 9 H. P. Twin: Bore 3.50 in., stroke 3.67 in., displacement 70.62 cu. in.	Ignition	Latest armored type Bosch magneto.
Crank Case	One piece crank case and cover, with ground joint. Perfectly rigid and oil tight construction.	Carburetor	Schebler Model H (1 in.).
Bearings	Large annular ball bearings with improved retainers in steel pockets. Connecting rod roller bearings and connecting rods themselves provided with take-up nuts for adjustment.	Transmission	Chain drive with free engine and variable speed clutch with side lever control.
Lubrication	Double oiling system, comprising sight feed drip and force feed pump internally contained in tank.	Gear Ratio	3 $\frac{3}{4}$ to 1, equal to 56 M. P. H. with motor running 2,500 R. P. M. Other ratios if specified.
Valves	Mechanism of simplest construction. Perfect accuracy of timing assured.	Control	Double grip control, designed especially for long wear and extra strength.
		Tank	Gasoline capacity 2 $\frac{1}{4}$ gal. with reserve compartment holding 1 pt. Oil capacity 2 qts.
		Fork	Spring Fork, Suspension Type.
		Seat Post	DAYTON Shock Absorbing Spring Seat Post.

Cam and Magneto Drive

Single forged shaft, cams integral therewith, rotated by worm gears, actuating all four valves and driving magneto.

Muffler	DAYTON, simple and efficient.
Brake	LESTER Center Braking Coaster Brake.
Wheels	28-in. C. C. Type, extra heavy rim for either 2 $\frac{3}{4}$ -in. or 3-in. tire. Front Wheel 36 spokes; Rear Wheel 40 spokes.
Guards	Extra strong, deep and wide.
Tires	United States 28 in. x 3 in., regular equipment. Diamond or Goodyear optional.
Saddle	Troxel No. 1 regular equipment, Persons optional.
Finish	DAYTON Carmine.
Wheel Base	57 inches.
Frame	Extra large heavy gauge tubing, re-inforced with D tubing.
Tools	Complete set in roll, in extra large metal tool box.



DAYTON

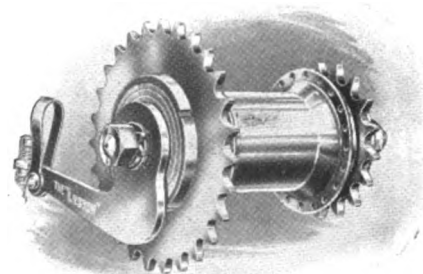
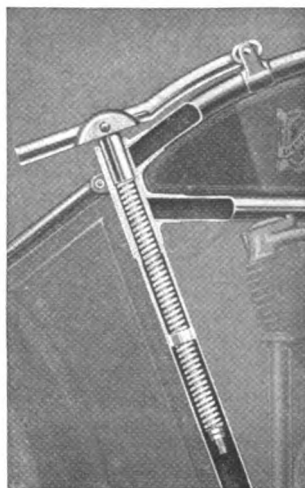
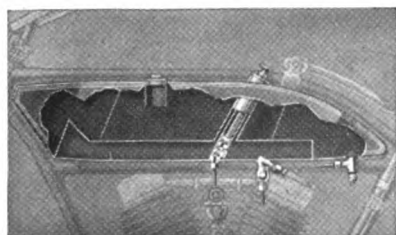
When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.


DAYTON

What Dayton Construction Accomplishes

There are no "Happenings" in the construction of the DAYTON—each feature is planned to meet the Rider's actual need.

The DAYTON Motorcycle is one the Dealer should be in position to supply because it is the one the Rider wants. The Rider wants the DAYTON because it gives him **what he wants** at every point. Note how fully each need is provided for.



POWER

7 H. P. and 9 H. P. Twin DAYTON Motors, developing respectively more than 11 and 13 actual Horsepower.

SPEED

A Flexibly controlled speed with a range of 6 to 75 miles.

COMFORT

The DAYTON shock absorbing spring seat post and suspension type spring fork. Three-inch tire equipment. Perfect balance.

RELIABILITY

Dependable power plant. Staunch frame construction. Positive control.

ECONOMY

Wear resisting at every point because "made right in the start." Efficient motor, minimizing gasoline and oil consumption.

CLEANLINESS

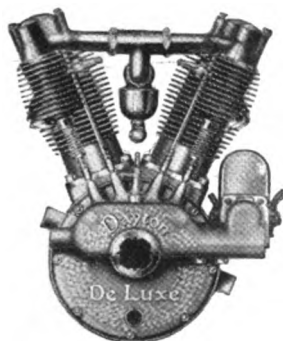
Oil-tight motor. Deep and wide mudguards.

SAFETY

Low center of gravity. Perfect balance. Strong rigid frame fully reinforced with "D" tubing.

TANK CONSTRUCTION

Every rider will appreciate the strongly reinforced, solid bottom, 22-oz., cold rolled copper tank with capacity for 2½ gal. of gasoline and 2 qts. of oil. Note the emergency compartment in the forward part of the tank.



The DAYTON Shock-Absorbing Spring Seat Post is strong, resilient and adjustable to suit the rider's weight.

The LESTER Motorcycle Center Braking Coaster Brake affords great safety and flexibility of control. It is an exclusive DAYTON feature.

The powerful DAYTON Engine will enable you to cover the ground in your own way, slowly if desired, but always with unlimited speed at your command.


DAYTON


DAYTON


Plant of the Davis Sewing Machine Company, Dayton, Ohio

A uniform standard of excellence can be maintained only by the united effort of a complete manufacturing organization. We have ample facilities and high-grade modern equipment. Our successes prove that.

DISTRIBUTING DEPOTS

To facilitate in rendering the best service to the dealer we have distributing arrangements with the following well-known jobbers in the territory indicated:

Central West

The Beckley-Ralston Co., 157 N. Michigan Ave., Chicago, Ill.

New England and New York State

J. W. Grady & Co., Worcester, Mass.

Pennsylvania, New Jersey, Delaware and District of Columbia

Haverford Cycle Co., 827 Arch St., Philadelphia, Pa.

Virginia, Maryland, North and South Carolina

W. H. Grover, Norfolk, Va.

Distribution on the Pacific Coast will be handled direct from our factory branch.

The Davis Sewing Machine Co., 628 Third St., San Francisco, Calif.

How Are You Going To Act On This Matter?

Are you going to let the opportunity of handling the DAYTON slip by, or are you going to investigate?

The DAYTON is a machine that riders are proud to own and one that dealers can conscientiously recommend. Our fifty years' experience is behind the DAYTON.

Nearly everyone is familiar with the various products of our factory. Take advantage of our valuable prestige. Make it pay you a profit.

Mail This Coupon Today For More Facts

The coupon below is for your convenience—sign and mail it today. Every dealer should know the facts. No matter what your plans are, it will pay you to investigate.

DAYTON agencies are being allotted every day. You will have to hurry. A special delivery letter or telegram will bring you the facts by return mail.

THE DAVIS SEWING MACHINE CO. DAYTON, OHIO

I am a motorcycle dealer and interested in your DAYTON proposition. Send me particulars.

Dealer's Name

Street Address

City State


DAYTON

When writing to advertisers, please mention **MOTORCYCLE ILLUSTRATED**.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



CONDITIONS OF THE CONTEST.

1. All are eligible and each contestant may submit as many suggestions as he desires.
2. The idea submitted must embody an improvement of the motorcycle or one or more of its parts and accessories.
3. Sketches should accompany descriptions, but the former need not be artistic. Rough drawings will serve the purpose. Descriptions, however, should be clear, accurate and to the point.
4. While it is not required, contestants are advised, in addition to accurately setting forth their ideas, to state why and to what extent they consider them as scoring points because of their (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical perfection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.
5. In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.

6. The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.

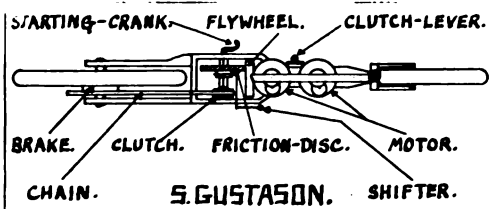
7. At least one dollar will be paid for every suggestion published.

8. Competitors are requested to address all their communications to Editor Improvement Contest, *MOTORCYCLE ILLUSTRATED*, 51 Chambers street, New York City.

Competitors in the Motorcycle Improvement Contest, and prospective contributors should note that the last improvement suggestions will be received for publication in the issue of December 26, and that the announcement of prize winners will be made in the following issue, that of January 9. Communications and drawings, to be eligible for consideration, must be in this office not later than December 20, so that they may be judged with the final suggestions to be published in the December 26 number.

FRICION-DRIVE MACHINE.

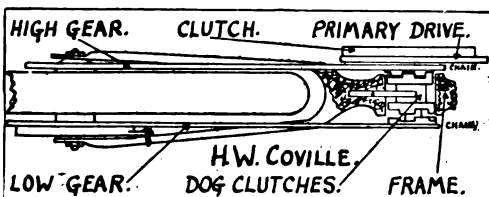
A **FRICION-DRIVE** motorcycle with either a single, double or four cylinder motor arranged longitudinally employs the fly-wheel for the driving member of the trans-



mission. In a special frame is fitted a squared cross-shaft on which is slidable a friction disc, controlled by a lever at the side of the frame. On the end of this shaft is fitted a sprocket which incorporates a friction clutch, and which is operated by a lever on the opposite side of the frame. The final drive is by chain on the right hand side, and a band brake is fitted. The motor is started by a hand crank which acts on the end of the cross shaft. Contributed by S. Gustason, Orient, Iowa.

TWO-SPEED GEAR.

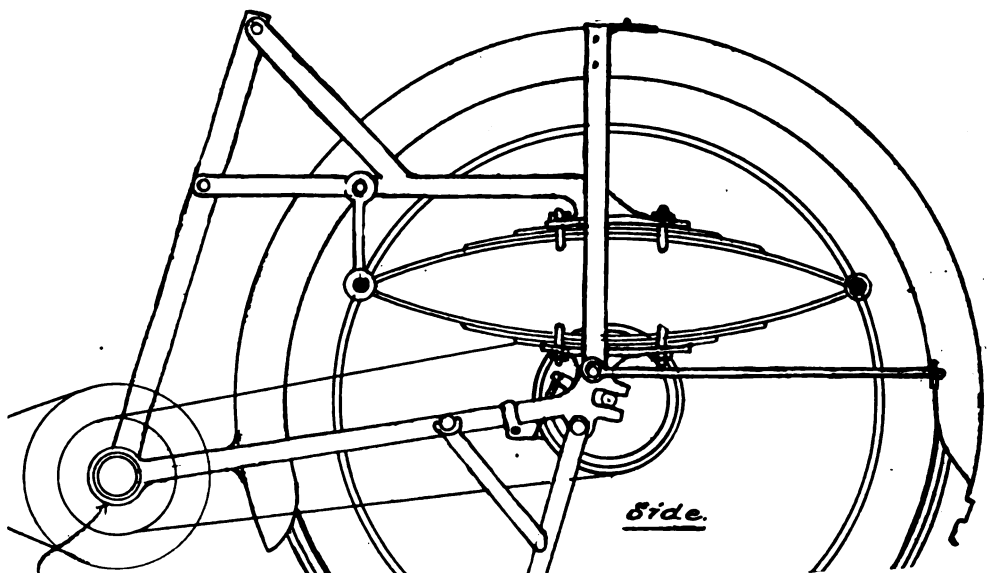
A **TWO-SPEED** gear with dog clutches and fitted in the frame or in a special attach-



ment to it, incorporates two chain drives. One of these is for the high gear, and is situated on

the left side, while the other is for the low gear and fitted to the right side. From the motor a primary chain drives the countershaft on which is a clutch of disc type, and a squared shaft on which slides the double dog-clutch. To the respective sprockets for the two drives are fitted dog-teeth, and the required speed or gear

on each side is connected to a linkage and there is a short vertical connection between the front end or shackle and the link-construction at its triangular portion. The motion is a rocking one, and is similar to that used on buggies for a number of years. Contributed by Edward Pommer, Minneapolis, Minn.



is put into driving action by coupling it up with the dog-clutch on the countershaft. Contributed by F. W. Covill, Salem, Mass.

SPRING FRAME.

FULL elliptic springs are mounted so that with the construction as a whole, they can oscillate around the axis of the rear wheel of the motorcycle. The top hanger of the spring

GEAR CASE BREATHER.

A **MAGNETO** drive gear case, if not vented, tends to force the lubricant out at the aperture through which the armature shaft revolves. Unless proper washers are fitted, the oil will often creep into the magneto, with disastrous results. If a "breather" is placed in the cover, about opposite the axis of the second intermediate gear, the creep of oil to the mag-

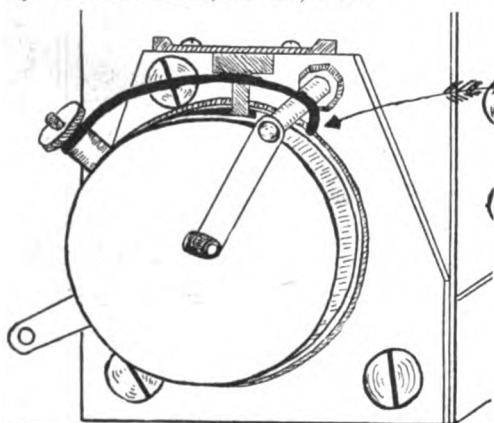
neto will be done away with. Contributed by Eugene Coughlin, New York City.

ADDRESSES WANTED.

WE are still without the addresses of R. C. Newman, of Chicago, Ill., and E. L. B. Blank, Pa. We also desire the home addresses of B. A. Waltz, of Detroit, Mich., and B. S. Mackerman, of Chicago. Letters addressed to these contributors have been returned and they are requested to forward full street addresses.

AUTOMATIC SHORT-CIRCUIT.

A SIMPLE and inexpensive device for automatic short-circuiting of the magneto is here shown. To the regular connection on the breaker casing is fitted a piece of 1/16-inch spring wire with its end bent at an angle. When the spark is retarded by the grip, this bent end contacts with the post that carries the spring cover-retainer and effects the short-circuit. Such a device does away with the extra wiring and more or less uncertain switch on the handlebar, it is claimed. Contributed by Wm. A. Pervier, Allston, Mass.



VISITED R-S FACTORY.

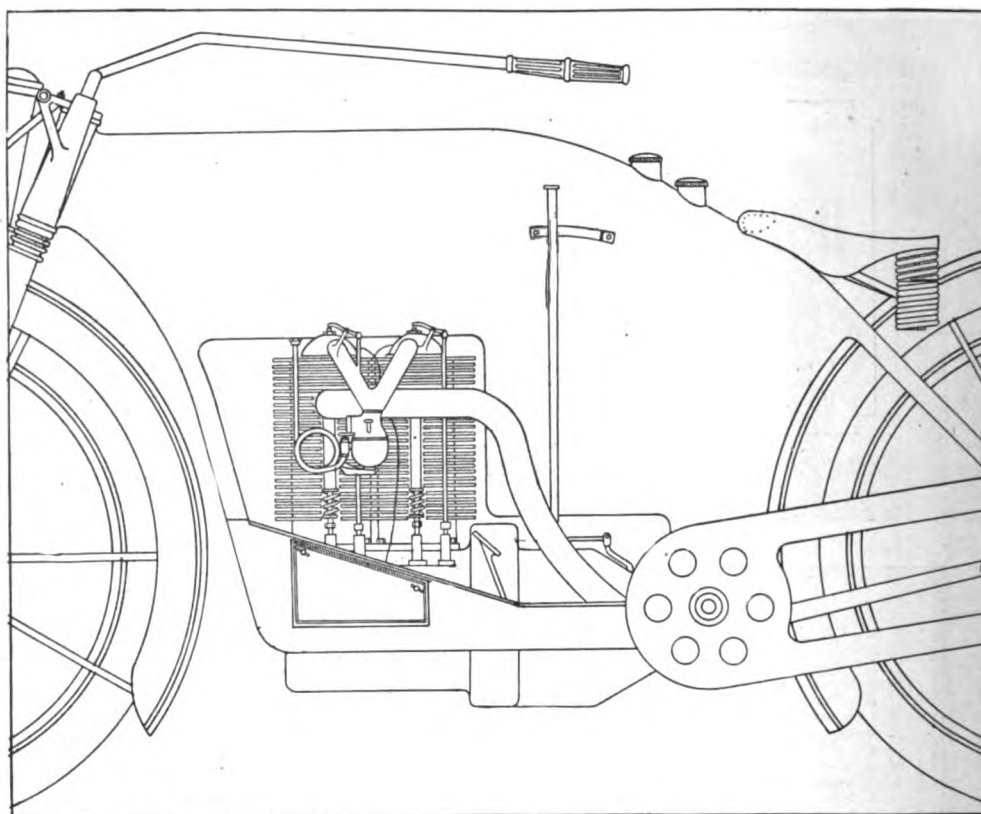
EUGENE COUGHLIN, distributor for the Reading-Standard products in New York City and Westchester County, with a number of technical men, paid a visit on December 2 to the Reading factory for a preliminary examination of the 1913 models. A thorough inspection of the plant was made under the guidance of Sales-Manager Atkins and Chief Engineer Franklin Dolt, but weather conditions were such that a personal try-out of machines was out of the question. However, President Deysher and the visitors ascended Mount Penn by automobile as far as the car could be driven with safety, but the road-testers on the new two-wheelers continued on to the top along the slippery mountain road with hair-pin turns. This, by the way, is part of the regular testing ground for the Reading-Standard Machines factory.

WANT SIDECAR PLATES.

IN Massachusetts sidecars are officially classed with automobiles and are required to carry large number plates similar to those carried on the four-wheelers. This does not meet with the approval of the sidecar enthusiasts and they are striving to have the authorities adopt a small metal plate for use on sidecars only.

A RUN IN THE SNOW.

DESPITE the fact that a fine snow covered the roads, a few members of the Queen City Motorcycle Club, of Cincinnati, Ohio, participated in an 80-mile run to Falmouth, Ky., recently.



TANK-FRAME CONSTRUCTION.

A UNIQUE tank-frame motorcycle, fitted with a 12 horsepower side-by-side motor is suggested and illustrated herewith. Unit power plant construction embodies a two-speed gear and large cone clutch, with bevel drive to a countershaft and final drive by chain, amply guarded. The two-speed gear is operated by a

lever at the side of the frame, and the clutch by a pedal on the left footboard. Tankage capacity is four gallons of gasoline and one-and-three-fourths gallons of oil. A spring device is incorporated in the rear frame, and a toolbox is also formed therein. Starting is by hand crank on the right hand side. Contributed by R. C. Darnell, Detroit, Mich.

ONE TOURIST SURVIVES

Nervy Youth Completes 5,000-Mile Trip by Motorcycle from Pittsburgh to Whittier, Cal., but Two Companions Fail.

HARRY E. Patterson, 20 years old, who recently finished a motorcycle trip from Pittsburgh, Pa., to Whittier, Cal., about 5,000 miles, is now entitled to membership in the rapidly growing squad of motorcycle transcontinentalists who blaze trails from coast to coast. Although his trip did not really start on the Atlantic coast, Whittier endured enough hardships in the Middle and Far West to offset the slight handicap with which he started. Patterson's actual running time was 35 days, according to his statements, although he spent 42 days on the trip; seven days were devoted to sightseeing in the larger cities.

When Patterson left Pittsburgh he was accompanied by two other motorcyclists, Ben Davis and C. E. Parker. Davis rode as far as St. Louis, Mo., where he gave up the trip. Patterson and Parker continued. Near Albuquerque, N. M., Parker was injured in a fall from his machine and at latest reports was in a New Mexican hospital suffering from water on one of his knee-caps. From Albuquerque Patterson was obliged to ride alone. The youth states that he encountered the worst roads and most dangerous going in New Mexico, Colorado and Arizona. On one occasion Patterson's supply of gasoline gave out and he was compelled to push his machine 10 miles to a ranch house where he

was fortunate enough to procure some of the precious fluid. The rider's average was about 125 miles per day throughout the trip, and his best day's run was 220 miles.

BALTIMORE AGENTS.

BALTIMORE, Md.—There have been three changes in the trade here in the last ten days. Gus and Bert Heinz, trading under the name of The Heinz Motor Company, have acquired the agency for the Harley-Davidson, formerly handled by the Chase Motor Company. They will open salesrooms at 533 North Howard street the middle of next month. Gus Heinz, who has been the repair man for Howard A. French & Co., Indian agents, will have charge of the mechanical end of the business, while Bert Heinz will be the general manager and salesman.

Edward Holofcener has become the agent for the Yale, which has been promoted here by the Little Joe Wiesenfeld Company.

John S. Bridges, a printer, has become actively associated with William Randall, of the Randall Manufacturing Company, in pushing the Reading Standard and Pope.

WILL COUNTY OFFICERS.

AT a recent meeting of the Will County M. C., of Joliet, Ill., the following officers were elected: William Streitz, president; C. A. Bloom, vice-president; H. F. Stoll, secretary-treasurer.

The Topeka (Kan.) Motorcycle Club is planning to hold a minstrel show in the near future.

QUESTIONS and ANSWERS

ON the whole the Editor of this department was well satisfied with the answers to Question No. 10—"Which is the better method of fitting valves, grinding or truing?" One contributor, indeed, stated that grinding was the better, inasmuch as it was necessary in all cases, whether the valve or its seat were previously trued or not. Truing by means of special devices or in a lathe has been found, however, to result in most excellent finishes for both valve and seat, and no further treatment was necessary. The contributor probably was not familiar with this method of fitting.

The first prize has been awarded to W. H. Ogle, of Moundville, W. Va., and B. A. Waltz, Ford Building, Detroit, Mich., receives the second prize. It should be kept in mind that the awards are based simply upon the best letters received and that the editor of this department does not stand responsible for the opinions advanced.

The series of contests now being conducted in this department will close with the issue of December 26, and announcement of the final winners will be made in the next issue, that of January 9. Contributors should submit answers to each question as soon as possible after its first appearance so that the work of judging and awarding prizes may be facilitated. All answers, and communications referring to the contests, should be addressed to: "Editor Questions and Answers, Motorcycle Illustrated, 51 Chambers street, New York."

Below are given question No. 11, that for which answers are now being received, and the new question, No. 12. Prize winners for No. 11 will be announced in the next issue.

Question No. 11. Why are the cylinders of a twin motor fitted at an angle?
Question No. 12. How can the proper operation of a battery and coil system be best determined?

FRANK

MERRITT

VALVE FITTING.

IN the answers to Question No. 10—Which is the better method of fitting valves, grinding or truing?—there is quite a diversity of opinions among contributors, and the most satisfactory answer was submitted by W. H. Ogle, of Moundville, W. Va., who has accordingly been awarded the first prize. B. A. Waltz, Ford Building, Detroit, Mich., receives the second prize. Ogle's answer was as follows:

"As to whether it is better to fit valves by grinding or truing depends on the condition of the valves to be fitted. In the case of a new valve which is not warped or badly pitted, grinding is all that is necessary, but if the valve has its seat or face pitted or is warped at all, it should first be trued, and then 'ground in' on its seat. The valve seat being generally of cast iron, and the valve faces of steel, it follows that the seat grinds away more rapidly than the face, and unless the iron seat requires much grinding to render it smooth and true, no more should be done than is necessary to get a gas-tight joint."

Winner of Second Prize

Waltz's answer differs from Ogle's, in holding that grinding is inseparable to every fitting operation. He writes as follows:

"The better method of fitting valves seems to be that known as grinding. In all fine engine work today, the final operation is grinding, where absolute truth of surface is sought and every precaution taken to obtain the best finish possible.

"While valve grinding is not an operation of the kind commonly included in the term grinding, it is of the same general character in that the final metal to be removed is by a process of abrasion by fine material. It can easily be understood that such a process is adapted to the final fitting of valves whose parts must be absolutely true to obtain the high duty demanded of motorcycle motors. While machine tools are necessary to give valve parts their approximate form, only by an insertion of some fine abrasive between the valve surfaces and a grinding or 'lapping' operation can the result desired be obtained."

HOLES IN PISTON.

S. ANDREWS—The holes in the second and third ring slots will probably give trouble through leakage inside of the piston body, if the upper ring is not gas tight. Pinning the upper ring so that its slot will not come opposite the holes would be advisable. On the other hand, such a leakage may not show itself for months, and when it does, the crankcase will become hot. It is advisable to plug up the holes, using cast iron in the process.

Regulation of the make of carbureter mentioned, with regard to the position of spark and throttle depends upon whether the whole instrument is out of adjustment. Try for slow speed, using somewhat of an open throttle and retarded spark, turning the needle-valve and closing the throttle until the motor turns over at its slowest pace. This when on the stand. Set for high speed by means of the little ball-

end lever on the numbered arc by the throttle spindle. Do the same when on the road, and you will get the best mixture possible by feeling the increase in the power of the motor as the needle-valve is turned. For slowest speed, the auxiliary air-valve should keep its seat until the throttle is opened. We can only give these general directions, as setting varies with each different motor.

ESTIMATING MILEAGE.

F. H. CHADWELL—We know of but one approximately accurate formula for estimating mileage per gallon for a given motor, which is as follows: $(373,248 \div DE) \times (WS \div 40) = C$. The quantity 373,248 is the number of cubic inches in a pound of gasoline; D is the piston displacement in cubic inches; E the number of explosions per minute; W the weight of the gasoline per gallon; S the speed in miles per hour, and C the mileage per gallon. Expressed in words, the operation is: find the piston displacement and multiply it by the number of explosions (half the number of revolutions) per minute. This result will be the number of cubic inches of mixture per minute. One pound of gasoline makes 216 cubic feet, or 373,428 cubic inches. Divide this figure by the cubic inches of mixture per minute, and obtain a product in minutes. Next multiply this by the number of pounds of gasoline per gallon and get the time value. Multiply this by the speed and then divide by 40, when the result will be a close approximation of the consumption of your motor. It will show theoretically at

what speed the best economy can be obtained. The formula does not pretend to extreme accuracy, and will probably underestimate rather than in the other direction.

For example; a single motor of 30.5 cubic inches ($3\frac{1}{4} \times 3 \frac{43}{64}$ ins.); 2,400 revolutions (1,200 explosions); speed 39.6 miles per hour (5.1 gear). Seven pounds to the gallon of fuel. Find C?

$$373,248 \div (30.5 \times 1,200) \times (7 \times 39.6) \div (40) = C.$$

$$10.19 \times 277.2 \div 40 = 70.610 \text{ miles per gallon.}$$

ACROSS THE CONTINENT.

FRANK J. PEARSON.—Take route from Providence as follows: Route 8 to New Haven; route 39 reversed, New Haven to New York; route 40, New York to Princeton, N. J.; Princeton to Philadelphia via Trenton, Langhorne, La Trappe, Bustleton, Fox Chase and Ogontz; Philadelphia to Gettysburg over route 69; route 54 to Hagerstown; route 99, Hagerstown to Pittsburgh, Pa.; route 145 to Cleveland, Ohio; route 104 to Toledo; route 125 to South Bend, Ind.; route 160 reversed to Chicago.

From Chicago take route 152, Chicago to Champaign; route 162 reversed Champaign to Springfield, Ill.; route 240, Springfield, Ill. to St. Louis; route 239 to Mexico, Mo.; route 230 reversed, Mexico to Kansas City, Kans.; route 243 reversed, Kansas City to Topeka; route 237 reversed, Topeka to Salina; route 236 reversed, Salina to Oakley, Kans.; route 225 reversed to Hugo, Col.; route 246 reversed to Denver. From Denver you will have several alternatives to the coast, the two chief being (1) Route 248, Laramie; 262, Rawlins; 266, Rock Springs; 268, Granger; 264 reversed, Pocatello, Idaho; 273 reversed to Walla Walla, Wash.; 272 reversed, Walla Walla to Seattle. (2) Denver, Golden, Idaho Springs, Dumont, Lawson, Empire Station, Georgetown, Berthoud Pass, Idlewild, Fraser, Coulter Junction, Hot Sulphur Springs, Parshall, Troublesome, Kremmling, Wolcott, Eagle, Gypsum, Dotsero, Shoshone and Glenwood Springs. From the latter place go to New Castle, then to Silt, Antlers, Rifle, Rulison, Grand Valley, Una, and De Beque. Next go to Mesa, Palisade, Clifton, and Grand Junction; then through Fruita, Loma, Mack, Ruby, Shale, Utahline, Cottonwood (Utah), Cisco, Thompson, Green River, Woodside, Big Spring Ranch, Wellington, Price, Helper, Castlegate, Colton, Tucker, Thistle, and Springville. From Springville go to Leland, then to Payson, Santaquin, Starr, Mona, Nephi, Levan, Juab, Holden and Fillmore; then on through Clear Lake, Granite Springs, Ibex, to Garrison. From Garrison go to Osceola, Nev., then to Ely. From there take route 249 to Lida and Goldfield. From Goldfield go to Big Pine, Cal., over the Sierra route, then west across the State to Fresno. From Fresno go through Mendota, Firebaugh, Dos Palos, Los Banos, San Luis, Bell's Station, Gilroy, San Martin, Morgan Hill, Coyote, San Jose, Milpitas, Irvington, Alvarado, San Lorenzo, Oakland and San Francisco.

The third route is the "Trail to Sunset," published by the American Automobile Association, 437 Fifth avenue, New York, price \$1.

WILLARD BATTERIES.

FREDERICK W. STEADMAN.—The Willard storage batteries are made by the Willard Storage Battery Co., Marquette road, Cleveland, Ohio. See the answer to H. De Lander, in the last issue.

THE NEW R-S

(Continued from page 27.)

Special attention has been given to braking systems in the 1913 models. The new 7-8 h. twin and the 5 h. model will both be furnished with two brakes. On the chain-driven models the Corbin V-band brake will be supplied, in connection with a powerful contracting band

brake, working on a substantial drum placed on the re-designed and strengthened rear hub. The latter brake is operated by a pedal which is placed close to the right foot-rest. In the Tourist belt model the second brake acts on the inner side of the rear belt pulley and is operated by a foot lever.

The new rear motor and eccentric bracket is integral, with a greater throw to adjust the chain. This eccentric is clamped on each end, thus doing away with the set screw and eliminating the possibility of the eccentric turning. It is provided with two oil cups, which afford perfect lubrication for the starting crank.

Increased Fuel Capacity.

The gasoline capacity of the twin and Tourist models has been increased to $2\frac{1}{4}$ gallons, an increase of nearly half a gallon over the Tourist size of the past season. The new style of rim permits of using either $2\frac{3}{4}$ or 3-inch tires, and the mudguards have been widened to afford additional protection in riding over muddy roads.

Reading brown is the standard finish, as usual, and an exceptionally rich and attractive effect is produced by the lighter shade of brown on the tank panel, with tasteful striping in black and aluminum. The other standard shade is sylvan green, with tank panel of a darker contrasting shade and the same type of striping, thus producing a beautiful two-tone effect.

Standardization of Parts.

It has been the policy of the Reading-Standard Company to standardize all parts, thereby making them interchangeable. This eliminates a number of special parts and does away with the necessity of agents having to carry in stock a large number of parts and still enables them to supply a part for any of the company's machines. On the single-cylinder models $2\frac{1}{2}$ -inch tires are regular equipment, and $2\frac{3}{4}$ -inch tires are fitted on the twin model. Still larger tires may be arranged for on specification. The Bosch enclosed magneto is fitted and Troxel saddles and the Schebler carbureter are standard on the firm's 1913 output.

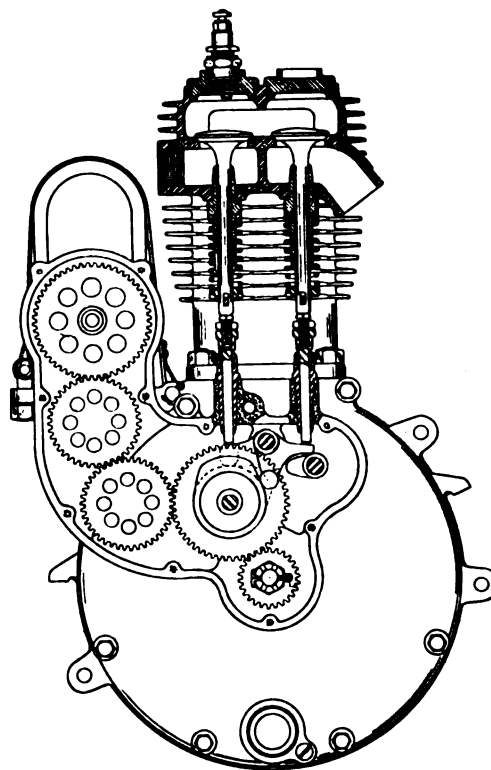
WHEELS AND RADIATORS.

JAY W. GOLDSTEIN.—In all probability, you can obtain the size of wheels you desire on the market without recourse to having them built. However, write the Neustadt Auto & Supply Co., 3200 Locust street, St. Louis; W. K. Prudden & Co., Lansing, Mich.; or the McCue Co., 1700 Elmwood avenue, Buffalo, N. Y. The latter house also makes wire automobile wheels. For radiators, try the Neustadt firm mentioned above, or the Briscoe Manufacturing Co., 1427 Woodward avenue, Detroit, Mich.

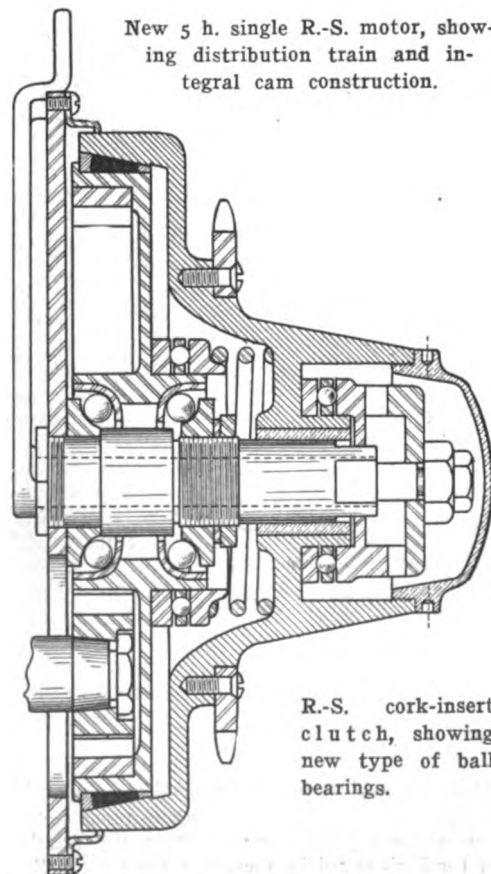
CANOELET SIDECAR.

M. A. PORTER.—The Canoelet sidecar is made by Messrs. Mead and Deakin, Ladypool Road, Birmingham, England. Its cost is about \$68, f. o. b. Liverpool. As shown, it is fitted to the left side of the machine—the proper side for countries where traffic keeps to the left. It may be that the makers will have to construct a special one for you to fit on the "off" or right-hand side on the motorcycle, for use in this country.

THERE are 810 licensed motorcyclists in Indianapolis this year. Last year there were 600.



New 5 h. single R-S. motor, showing distribution train and integral cam construction.



R-S. cork-insert clutch, showing new type of ball bearings.

DELIVERIES

LAST year the Hirsch Cycle Company of Seattle, sold 50 Harley-Davidsons—all they could get. Their 1913 contract calls for 150. At this writing we have shipped 58 of these to them, all 1913 models of course, and it is only seven weeks since our announcement was made.

The Hirsch Cycle Company got their contract in early. They specified definite delivery dates. The result is that they received the machines when they could sell them with practically no effort.

Other dealers in Seattle have not received their 1913 demonstrators, to say nothing of making deliveries to regular customers. The Hirsch Cycle Company will probably have their whole allotment sold before the other fellows have made a decent start.

Our Seattle dealers are wide-awake people. A three to one increase in sales in one year tells its own story. But this bigger business would be impossible without the co-operation of an organization like ours. No maker can compete with us when it comes to real service.

As usual, we are on the job ahead of the rest. We are making immediate deliveries on both singles and twins on all contracts where definite delivery dates were specified. Is any other manufacturer doing this? Are you hooked up with the right people?

Harley-Davidson Motor Company

Producers of High-Grade Motorcycles for Eleven Years

321 C Street

Milwaukee, Wisconsin

NEW THREE-WHEEL MACHINE SOON

Commercial Motor Company, of Minneapolis, Will Produce Standard Chassis with Four Body Types, Two for Delivery Work, One for Mail Collecting and One for Pleasure Service.

MINNEAPOLIS, MINN.—The Commercial Motor Company, of this city, has been organized for the purpose of placing on the market a newly-designed machine with four body types, suitable for both commercial and recreation uses. Only one chassis will



H. F. TURNER.

be built and the body will be fitted to specification. There will be one enclosed delivery body of large capacity, one open stake body for larger and heavier materials, one special body with drop-out side chute and hopper bottom, for mail collecting, and a passenger body with a double side-by-side seat for taxi or pleasure service.

The organizer of the new company is H. F. Turner, until recently associated with the Minneapolis Motorcycle Company as sales manager. Mr. Turner will be general manager of the Commercial Motor Company. It is announced that Mr. Turner evolved the general chassis design after close study of the demands made of small commercial vehicles, and it received the finishing touches at the hands of three experienced engineers. The construction is simple and sturdy; the number of parts has been reduced to the minimum, and the lines of the vehicle are pleasing.

The frame is of light, triangular channel steel, and the front axle is drop-forged throughout; springing is by four cantilever springs 24 inches long and 2 inches wide, two on the front axle and one on either side of the rear axle. The motor is of the single-cylinder type and generates 5 horsepower. It has mechanical inlet valves, and is fitted with Bosch magneto and Schebler carbureter. Chain transmission is used, with two-speed, a single lever operating the clutch and gear-shaft. Wire wheels are used throughout, with 28-inch rims and 3-inch tires. The Eclipse clutch is standard equipment. Cooling is assisted by a blower on the motor. Steering is by a 12-inch wheel; spark and throttle controls are at the top and the gear shift lever is on the column. The driver occupies a leather-covered aluminum seat with a spring cushion.

The office of the company is now located at 47 Security Bank building, Minneapolis, but shortly after January 1 it will be moved to the new factory.

HENDERSON A DIRECTOR.

AT a meeting of the Board of Directors of the Twentieth Century Manufacturing Co. on November 14, Manager J. G. Henderson was made a member of the directorate. Reports submitted that this session indicated that the Twentieth Century business has never been more promising, and preparations are being made on an extensive scale for the prompt filling of orders.

Charles F. Brooks, of the Twentieth Century staff, returned recently from an extended business trip on which he touched at many of the larger cities throughout the West and Middle West. He experienced no difficulty in marking his trail across the country by a string of good-sized orders.

IN INDEPENDENT SHOW.

FEARING that a recent announcement regarding its Show plans might be interpreted to mean that it will not be represented in the independent motorcycle exhibition in Chicago, the Bosch Magneto Company an-

nounces that it will have a large stand there, centrally located, at which an unusually interesting display of Bosch products for the motorcycle will be shown.

C. C. RIMS ON THE DE LUXE.

AN error crept into the article on new rim types, published in the November 28 issue, when it was stated that the De Luxe machines, manufactured by the Excelsior Cycle Company, of Chicago, were being fitted with B. B. rims. As a matter of fact, the De Luxe carries C. C. rims, and reports from dealers indicate that they are meeting all the requirements.

YALE ECONOMY.

DR. S. W. CLARK, of Sterling, Ill., reports that he has traveled more than 7,000 miles on his Yale motorcycle during the 1912 season and has never had to tinker in any way with his engine. His machine has the extra-large tires that characterize the Yale and he claims they are good for another 7,000 miles.

ECLIPSE ADDITION

Necessitated By Remarkable Popularity of Eclipse Products—Three Hundred Employees.

WITH the completion of the latest additions to its rapidly growing plant, the Eclipse Machine Company, manufacturers of Eclipse clutches, brakes, hubs and fork heads, will have added more than ten thousand square feet to the floor area of its factory. The new structure will include a machine shop with twenty-five new automatics and inspection and stock rooms. Hardly more than a year ago, the Eclipse Company had in its employ 125 men; now its employees number upwards of 300, all engaged in manufacturing equipment for motorcycles and bicycles. The growth of the company's clutch business has been especially rapid, so that to-day Eclipse clutches are known and popular in practically every American locality in which motorcycles are used. The company has been handicapped by lack of proper manufacturing facilities in the face of this big demand for Eclipse clutches. The additional space and machinery, however, will provide more than sufficient equipment for all possible 1913 requirements.

HAVERFORD BRANCH IN DETROIT.

A BRANCH of the Haverford Cycle Company will be opened this month in Detroit. It will be in charge of E. C. Kicherer, well known to the trade by reason of his having been identified for many years with the N. S. U. Motor Company, in New York. The branch will be established in a central location on Woodward avenue. The store selected has a frontage of twenty-five feet and a depth of ninety feet, including a basement of the same dimensions. Mr. Kicherer, besides carrying a complete stock of parts and accessories, has practically closed arrangements for distributing agencies, covering the entire state of Michigan, for two leading machines. The equipment of the branch will be such as to make the store one of the finest of its kind in the country.

Mr. Kicherer has severed connections with the Sun Motor & Supply Company, of New York, having sold out his interest to John Lentz. The latter has moved to Detroit and leased a store at 206 St. Aubin avenue, where he will carry a complete line of N. S. U. parts, and also conduct a repair shop, with special facilities for taking care of the requirements of N. S. U. riders in all parts of the country.

DE LUXE AGENCIES.

THE following dealers have recently contracted for 1913 De Luxe agencies: Hirsch Cycle Company, of Seattle, will handle the De Luxe in Northeastern Washington; the Santa Fe Trail Garage, of Dodge City, will push the line in Southeastern Kansas; Peter H. Lowman, of Warren, Ohio; the Wilkauke Cycle Supply and Sales Company, of Milwaukee, have closed for the entire State, and Charles H. Nelson, of Rapidan, Minn., will handle the line in Blue Earth County.

CLINTON WOLF, of Taneytown, Md., and C. B. Schnepfe, of Havre de Grace, Md., are local F. A. M. appointees.

**"It Never
Failed Us
Once!"**

said a motorcyclist at the
end of a 1,700-mile run.
This is the usual experi-
ence with the

HERZ PLUG

"BOUGIE MERCEDES"

HERZ PLUG
New Motorcycle Model



Since 1894
the
standard
of Europe
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\$1.25

At all good
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or direct

It is the only Plug *sure* to
stand up under all conditions;
the only Plug with Indestruct-
ible Stone Insulation; the only
Plug guaranteed not to carbon-
ize—not affected by oil; the
only Plug that's

Guaranteed a Full Year!

HERZ & CO.

295 Lafayette St., New York

Ask for the New, Improved 1912 Model

Here's Just the Right Christmas Present!

If you want to make him happy, get him a pair of

**Goodwear
Hand**



**Wind
Shields**

They're just the thing for cold weather riding. Heavy Waterproofed, Arctic Cloth, Wool Lined. They're comfortable, easily adjusted, roomy, and keep the hands and wrists warm while permitting the greatest freedom of movement.

OUR "GET ACQUAINTED" OFFER SAVE 50 CENTS

In order to introduce ourselves to the rider, we make the following offer:
Send us \$1 with the coupon shown here, which is good for 50c., and
we will send you a pair of our \$1.50 Goodwear Hand Wind Shields,
all charges prepaid, on 10 days' trial. If unsatisfactory, send
them back and we'll return your money.

Let us send you complete catalog of our "Economy
Line."

Go to it!

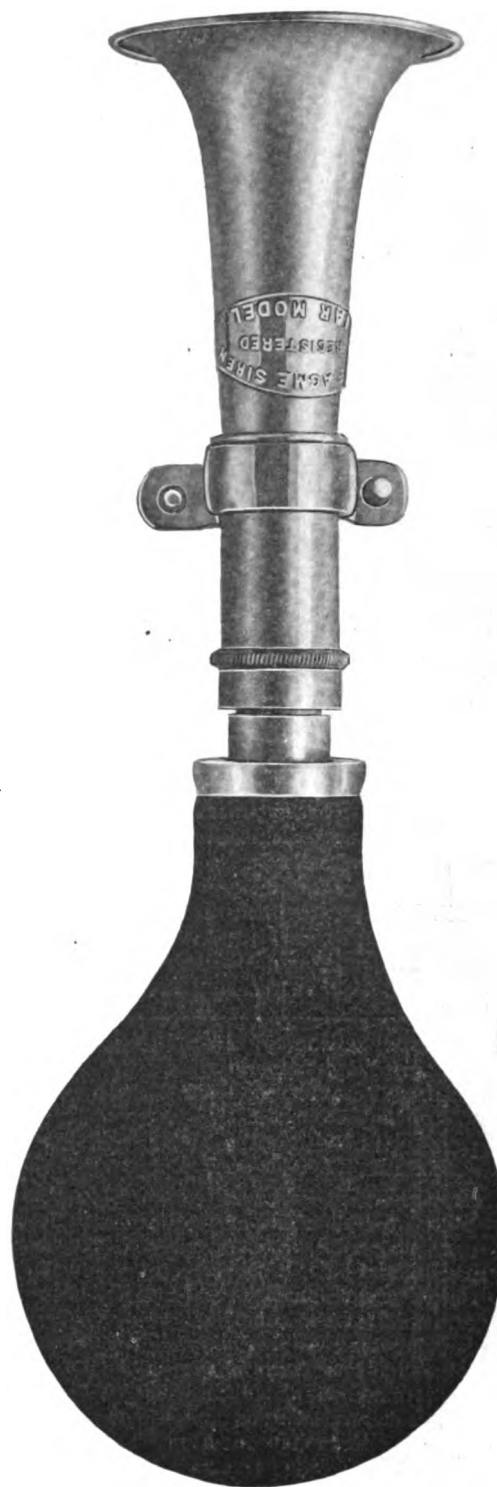
Goodwear Specialty Mfg. Co.

Office 302

45 W. 34th Street,
New York.

I en-
close
herewith
\$1. Send me a
pair of your \$1.50
Hand Wind Shields
on ten days' trial. If
they don't suit I will return
them and get my money back.

REBATE COUPON — GOOD FOR 50c.
Name.....
Address.....



That Mysterious Sound!

Did you hear it? That low moan growing into
a shrieking yelp and then dying away into
silence? It says, "Look out—I'm coming!" It's

THE ACME SIREN

"The little horn with the enormous range"

When you hear it you'll want one.
Write us for booklet.

Sarco Engineering Company

112 Broad Street, New York

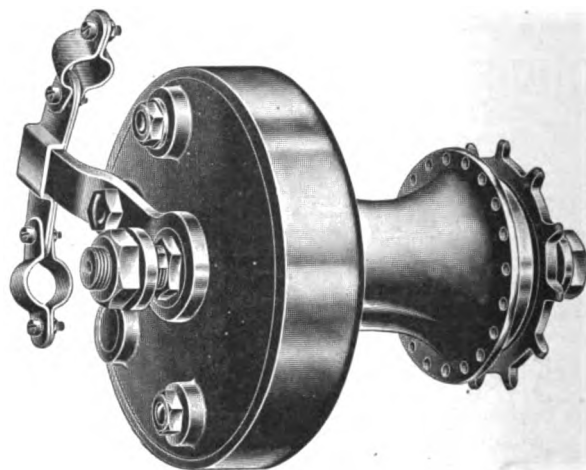
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ANNOUNCEMENT

A Motorcycle Coaster Brake That Is Strong Enough to Hold an Automobile

For some time past the motorcycle trade has felt the need of a coaster and braking device of sufficient power, strength and efficiency to give the rider control of high-powered machines.

The 1913 New Departure will do this and then some. It doesn't require much effort by the average rider to exert a back-peddalling pressure of 75 pounds. In this new model such a pressure will give A BRAKING FORCE OF



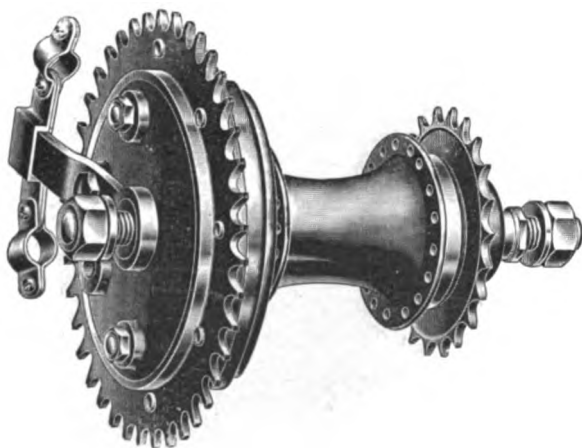
MODEL L

1913 New Departure Motorcycle
Coaster Brake for Belt Drive Machines

ONE AND ONE HALF TONS in the rear hub—a power sufficient to stop an automobile.

The action is positive. There is no possibility of locking. The mechanism is heavy—stronger than necessary.

Every motorcycle expert who has seen it says it is the ideal brake—just what rider and manufacturer have been waiting for. Fully described in new catalog, send for your copy today.



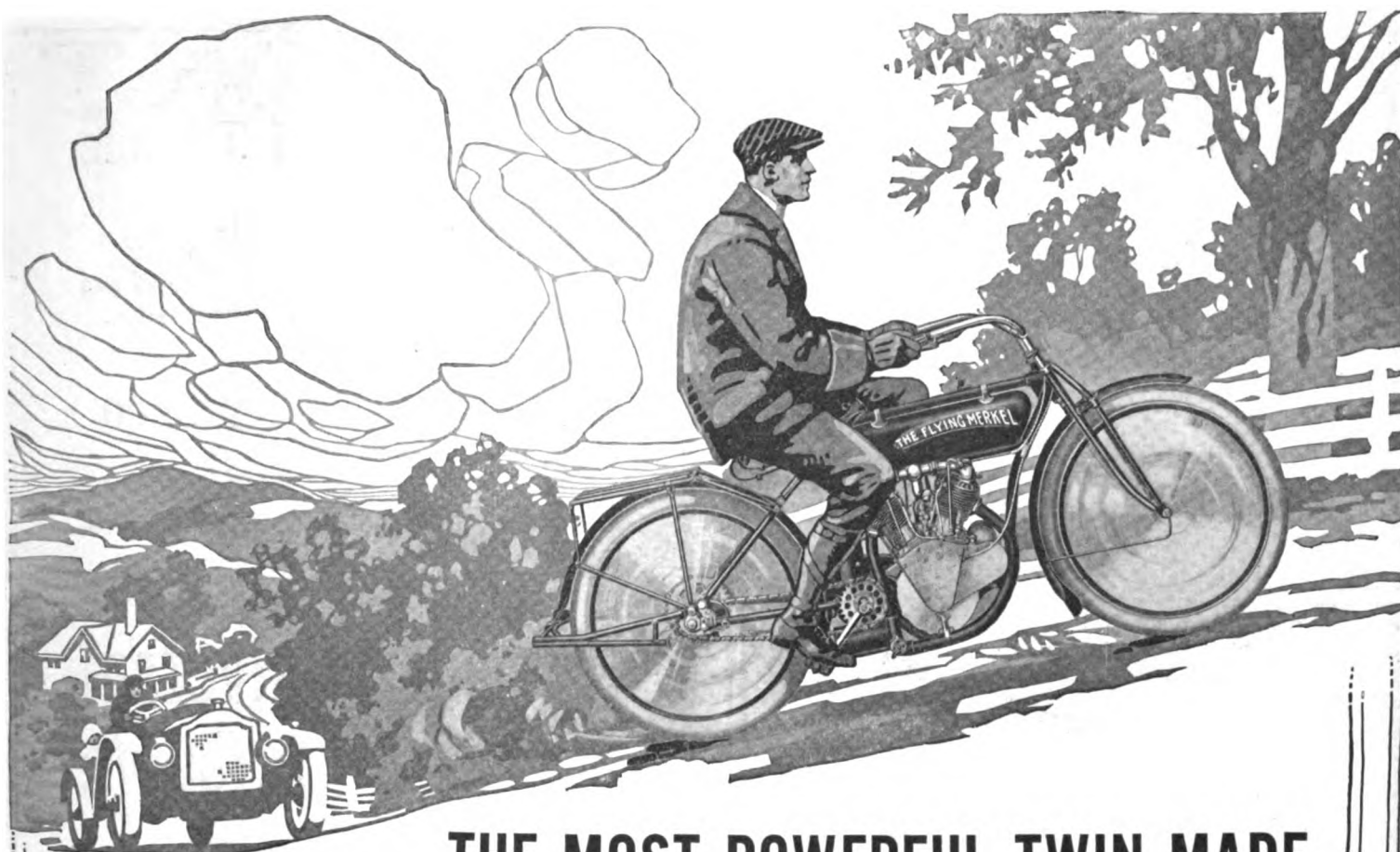
MODEL LL

1913 Model New Departure Motorcycle
Coaster Brake for Chain Drive Machines

The New Departure Mfg. Co., Bristol, Conn.

COASTER BRAKE LICENSORS

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THE MOST POWERFUL TWIN MADE

Since our 1913 announcement appeared two weeks ago we have received two or three sacks of mail every day—all inquiries from persons who want to know more about

THE FLYING MERKEL

The Only Self-Starting Two-Speed Motorcycle in the World

The 1913 Flying Merkel embodies every feature that could be desired in a motorcycle, and many exclusive features hitherto believed impossible to apply to a two-wheeled vehicle. The wonderful Self-Starter, Two-Speed Free Engine Hub, Hess-Bright full Ball-Bearing Motor, the Original and ONLY successful Spring Frame, low saddle position, Mechanical Valves and many other features.

Exhaustive tests have proved the 1913 Flying Merkel the most powerful motor made. The twin has climbed hills that no other motorcycle ever before has conquered, while the single can romp up tortuous grades that some big twins have difficulty in surmounting.

The 1913 Flying Merkel universally has been acclaimed the sensation of the motorcycle world. Ask the most successful dealer in your town—he represents the Flying Merkel, or write direct to us for 1913 advance catalog.



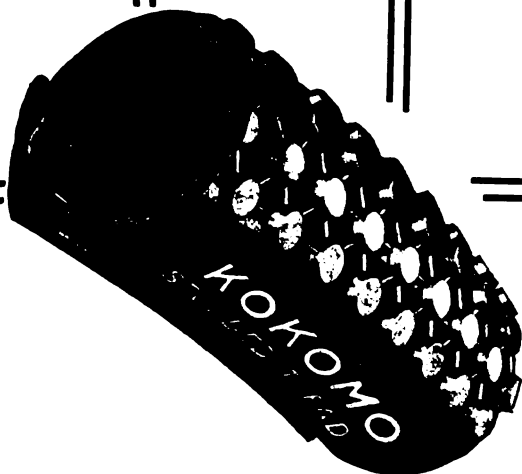
The **Miami Cycle & Mfg. Co.**
300 HANOVER STREET
MIDDLETOWN, OHIO
MEMBER M.M.A.



California Distributors	The Appeal Mfg. & Jobbing Co., Los Angeles.
Oregon & Western Washington	West Coast Supply Co., Portland, Ore.
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KOKO TIRES



KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

Low Cost
Durable
Efficient
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TIRES

Literature sent upon request.

KOKOMO

RUBBER COMPANY

KOKOMO, IND.

Have You Had Trouble With Your Tires?

A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

Schrader Universal Tire Pressure Gauge



(Made under patent dated March 1, 1896.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

A. SCHRADER'S SON, Inc.
28-30-32-33 Rose Street NEW YORK CITY



"To the Victor Belong the Spoils"

Mr. W. T. Marsh, of the American Motor Co., Brockton, Mass., one of the staunchest adherents to the "lost cause" of the belt drive, has unconditionally capitulated to the irresistible arguments put forth by us, and has placed an order for

"THE COVENTRY" CHAINS

to fill his season's requirements.

This is more significant than appears on the surface. It means that not only have the facts put forth by us taken firm root in the minds of the motorcycle public, but they have also influenced to a large extent the transmission plans of the motorcycle manufacturers themselves.

In taking up the cudgels for the chain in general, we have assumed a position of leadership in the chain field which is rightfully ours. While our advertising has considerably helped every chain manufacturer, we rely upon the reputation of "The Coventry" Chains as a

high-class product in every way—as the strongest, fastest, most durable and most silent chains made—to receive the preference which is theirs BY RIGHT OF MERIT.

WISE DEALERS ARE CATALOGING "THE COVENTRY" CHAINS.

SARCO ENGINEERING COMPANY

112 BROAD STREET, N. Y.



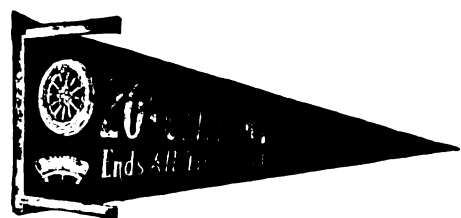
DEALERS! We Make Pennants for the Machine You Handle

Every motorcyclist is glad to have a pennant flying from his "bus." And they make dandy wall decorations. Order a sample lot and see how quickly they're sold.

We reproduce designs and pictures with lifelike realism. Being manufacturers, we are in a position to quote you exceptionally low prices.

We shall be glad to send you full particulars on request. Write us today.

Spiegel Art Co. 111 Broadway, Brooklyn, N.Y.

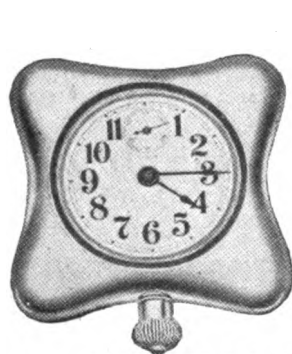


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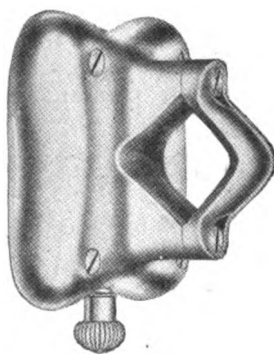
DEALERS! ^{In} Motorcycle Accessories **ATTENTION**

The Volume of Our Business Insures Prompt Service—Reliable Goods

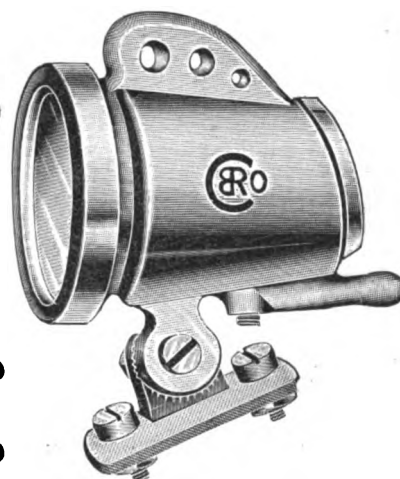
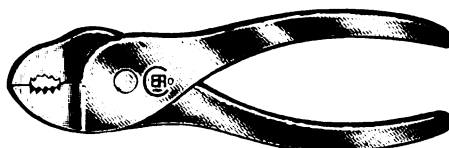
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NATHAN

All You Can Ask For Is Guaranteed by This Mark

Whatever you want in the line of leggins, clothing or motorcycle specialties, you can supply your wants to the best advantage by selecting an article bearing the Nathan Trade Mark. You pay the price you know is right. Experience with Nathan Goods will prove that they have the quality and durability you so much desire. The Nathan guarantee stands for something. It is not simply a promise. It means that we actually make good our claims.

FREE Our catalog should be in the hands of every dealer and motorcyclist. Write us today for a copy. It's free. **WRITE**

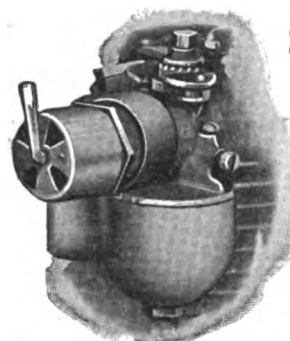
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**Thirteen Thousand Riders
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THREE CENTS A WORD



Clark Motorcycle Starter

A NEAT and compact attachment for the carburetor, that starts the engine without excessive pedaling, reduces carburetor trouble fifty

per cent and cuts down the gasoline bill.

[Price, 75c. each]

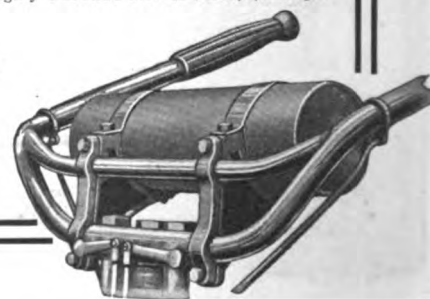
Clark Acetylene Tank Brackets

Model "A," designed specially for Excelsior Motorcycles, fastens to the handlebar in a rigid position and does not allow the slightest movement or vibration of tank.

In setting tank into the brackets, an eccentric arm is pressed down and holds tank solid. No screws or bolts to tighten or loosen. Tank can be removed in a second by releasing eccentric arm. The tank in this position does not interfere with any other attachment on the machine. Furnished complete with steel bands and necessary bolts for attaching. State Model of Motorcycle when ordering. Price, Highly Polished Nickel Plate, \$2.00 per pair.

W. F. Clark
Mfg. Co.

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"A DOLLAR IN THE LOCK IS WORTH FIFTY IN THE REWARD"

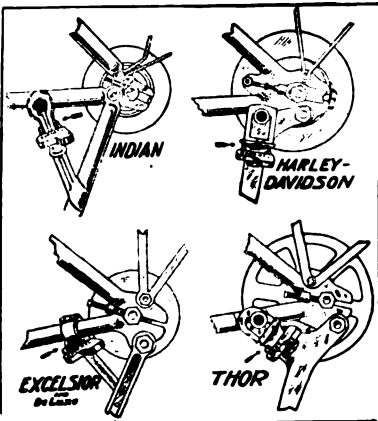
"Motorcyclist's Book of Proverbs"

¶ Keep your name off the list of "Stolen Motorcycles." Almost daily you see mention of another machine stolen. Laws against motorcycle thieves are weak and the only way to thoroughly protect yourself is by locking your machine so it cannot be moved except by YOU—and the only lock that prevents machine being moved and that cannot be picked, pried or cut, is the "SABO."

¶ You can safely leave your motorcycle anywhere if you have a Sabo lock. It fits tight to the frame—cannot be pried off—there are no chains to be cut by pliers. You've got the goat of every motorcycling "Jimmy Valentine" that wants a ride on your gasoline. The lock is scarcely noticeable. The would-be thief will perhaps not see it; will walk up to the machine acting as if it were his own. But when he tries to move it from the stand he'll learn "Sabo's on the Job."

¶ It's made of bronze metal, neat, simple, strong—fits your smallest pocket—lasts forever. The stand is locked securely to the frame—the machine cannot be moved while the lock is there—no danger of breaking spokes or chain by forgetting the lock and pushing machine from stand. It is impossible to wheel or ride the machine away.

¶ We prefer to have you buy from your dealer, but, if he does not have it, send this order blank with a dollar and the lock will come back to you, satisfaction guaranteed, prepaid, by return mail.



JOBBERS

List this in your 1913 Catalog. Cuts, literature and advertising matter furnished. Write for proposition.

DEALERS

Stock this lock. Showing it means selling it. We refer inquiries, furnish cuts, literature, etc. Send for proposition.

Sabo Manufacturing Company

3110 West 25th Street

CLEVELAND
OHIO

Sabo Manufacturing Co.
CLEVELAND, OHIO

Enclosed find a dollar for a Sabo Motorcycle Lock for machine.

NAME.....

ADDRESS.....

DEALER'S NAME.....

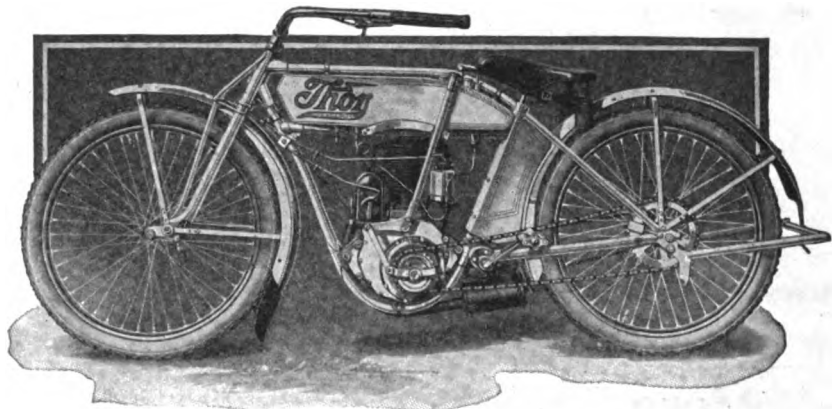
Thor MOTORCYCLES

WE ARE THE ORIGINATORS OF CHAIN DRIVE MOTORCYCLES

Remember the *Thor* is not an experiment. We have again proven during the season of 1912, just passed, that quality counts, hence the demand for *Thor* this year.

The trade-mark *Thor* is recognized as being the standard of quality and originality; in fact, the best motorcycle made. It is most perfect in design, mechanically correct and most durable for all kinds of service. The best proof of this is to ask the man who rides one.

A discriminating buyer will be satisfied with no other. It is the chain drive that gets there—it is invariably the *Thor*.



MODEL "13-M" \$225.00

This 4 H. P. model is the fastest single cylinder ever manufactured. This is even faster and more powerful than our previous models of the same size.

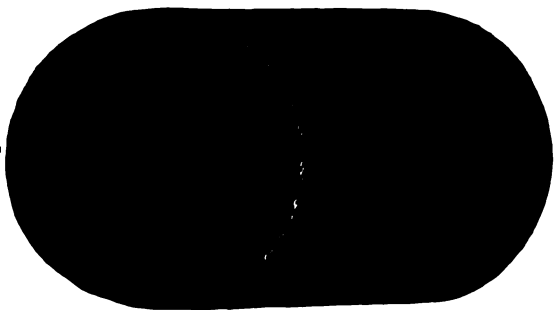
Immediate delivery can be made on our 4 H. P. Single; Twins commencing December 10th. Advance catalog ready.

We are now considering applications for agencies.

AURORA AUTOMATIC MACHINERY CO.

General Offices: Thor Bldg., 1307 Michigan Ave.,
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Brown Scientific Non-Deflating Pneumatic Tube

AN AIR-FILLED MOTORCYCLE TUBE POSSESSING VERY UNUSUAL FEATURES:

First: It withstands a tread puncture without deflating the tube.
 Second: The higher the pressure the tighter the puncture closes.
 Third: It eliminates the risk of destroying casings by reason of punctures.
 Fourth: The danger of loss of control of machine is removed.
 Fifth: It assures you of not being obliged to repair a puncture on the road and gets you "there and back" on full tires.

AIR FILLED ONLY.

Punctures are self-closing by reason of a scientific but simple principle of construction.

NO "DOPE," GUM, PASTE OR OTHER STUFFING MATERIALS.

Write for prices, full description and sectional sample.

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AURORA



MOTORCYCLE

BRAND

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"When the frost is on the pumpkin" and the weather begins to become "nippy," that's the time to change to one of our Fustian motorcycle suits. They're warm—they're comfortable—they're neat in appearance—they're perfectly fitting—they're—oh, well—they're everything that's desirable in a motorcycle suit. Our motto,

Strength in Every Fibre Quality in Every Thread

is rigidly upheld in these winter suits. By the way—a suit like that would make a corking Christmas present. Why don't you drop a hint where it would do the most good? Or get one for your friend. Each suit is made to individual measure and is as perfect as skillful workmanship, high grade materials and advanced ideas in motorcycle clothing manufacture can make them.

Dealers, investigate our proposition

Fowler-Carnes Company
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For Your Motorcycle use a **HEITGER** Carburetor

PERFECT CONTROL
 From 1 to 100 Miles

More Speed
 More Satisfaction
 More Economy

Send for Catalog today

HEITGER CARBURETOR CO.

Indianapolis, Ind.

H. T. Roberts, Selling Agent, 538 S. Dearborn St., Chicago.

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OUR BIG
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 the largest of
 its kind ever
 published, will
 be mailed
 to any ad-
 dress on
 request.

WRITE TODAY

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 ORGANIZED 1904 INCORPORATED 1910
 LARGEST MOTORCYCLE SUPPLY HOUSE IN AMERICA
 HAMMONDSPORT, NEW YORK.

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You May Have Suspected It BUT WE SAY TO YOU NOW!

**"The Proof of the Pudding
is in the Eating"**

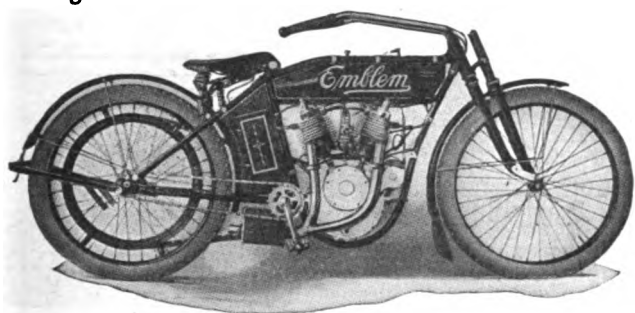
The proof of the *Motorcycle* is the riding, whether you consider a little jaunt like from St. Paul to Buffalo and return (2700 miles), carrying two, with no trouble or repair expense, or 10,000 miles covered with a repair expense of 70 cents, proofs of *Emblem Efficiency* or not. When you ride one you will at once notice the difference.

The wonderful shock-absorbing construction makes it ride like an Automobile De Luxe.

The remarkably powerful silent motor gives you a world of speed which is available even on rough roads (the bumps don't jar).

The EMBLEM outwears most of them and rides easiest of all.

Twenty years experience has taught us what the most exacting rider demands.



The 1913 EMBLEM has it all

4 H. P. Single, \$200.00—BELT OR CHAIN
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10 H. P. Twin—The Mile a Minute EMBLEM—\$300.00
CHAIN ONLY

Mechanical Valves On All

2½ in. Tires on 7 H. P. 3 in. Tires on 10 H. P.

Some good territory still open. There will soon be an EMBLEM dealer in your town. Better be that dealer by writing today.

Emblem Manufacturing Co.
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IN your selection of various equipment, do not overlook your motor; at that point concentrate your attention, for no matter what refinements you may select, your motorcycle cannot be satisfactory without a thoroughly dependable ignition system.

BOSCH

MAGNETO and PLUGS

are considered standard throughout the entire world. They have met the demand for an ignition system of permanent reliability and efficiency; one having all those features required by the most exacting engineers of the gas engine industry. With this reputation you can be positive that Bosch Magneto with Bosch Plugs will serve ignition to you to your entire satisfaction.

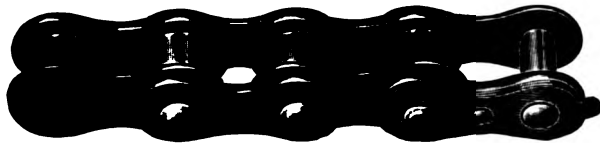
Be Satisfied

Specify Bosch

BOSCH MAGNETO COMPANY
223-225 West 46th Street New York

Your Motorcycle

should be equipped with chains that will stand up under all conditions. You can depend upon the "Whitney" Chain whether in rain, mud, sleet or snow; they are always on the job. They give the maximum amount of service because they are made by men with years of experience in chain making.



When making replacements insist on a "Whitney."

*"Whitney" Chains
Are Built for Strains*

The Whitney Mfg. Co.
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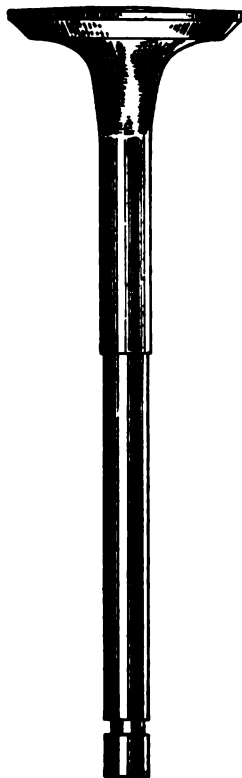
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get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

If you are not using them, will you go into the matter with us?



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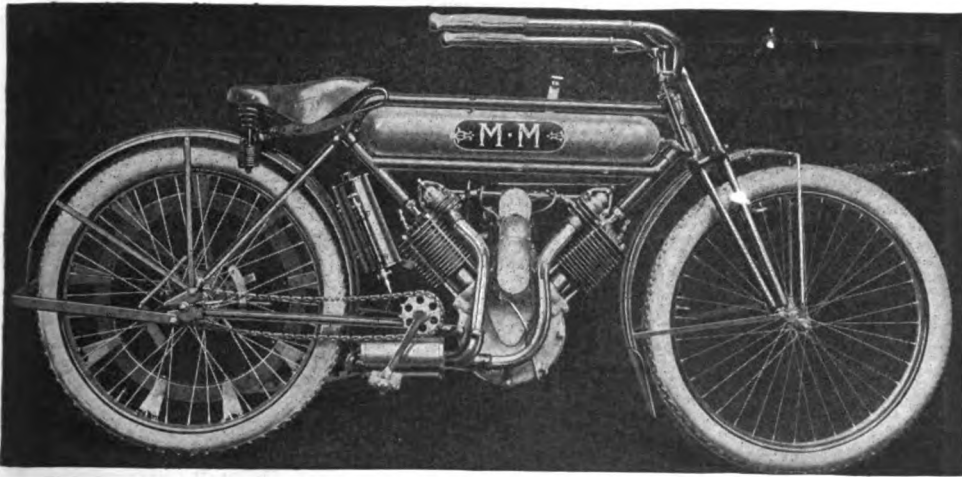
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In Two Buildings
For Two Weeks

One Admission To
Both Buildings

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8 H. P. **M.M.** TWIN

Most powerful hill climber and the only perfectly balanced motor. 90% angle cylinders does the trick.

Twin \$240 Four-fifty \$200

Both the best in their class. Bosch enclosed magneto and Eclipse Free engine clutch.

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To do justice to the wonderful scenery of New England, which for dignity, grandeur and historical interest cannot be surpassed, the Excelsior is the logical motorcycle. Whether bowling over its perfect roads, or climbing some "stiff" hill, the Excelsior works with the same unvarying smoothness and power.

If you are a dealer in any of the states mentioned below, you can become our agent in your town, and thus reap the harvest of big business which is the lot of every Excelsior dealer.

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Vermont
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J. W. GRADY & CO., Worcester, Mass.

OLD SOL

will turn on the
big light in the
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Keep your peep-
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Economy Is The Keystone Of Success

If you want to make the first long step toward true economy in the purchase of guaranteed motorcycle supplies and accessories, send for our large illustrated catalog. It will save YOU Money.

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Look For the "White Strip"

On the Belt You Buy. It Means:

1. *Guaranteed Stock and Construction.*
2. *Three times the strength of ordinary leather.*
3. *An end to stretching troubles. It is guaranteed not to stretch.*

We make White Strip Stretchless Flat Belts, White Strip Stretchless V-Belts, Sea Lion Waterproof Flat Belts, Chiboco Pulley Laggings, Sea Lion Waterproof Cement and Sea Lion Belt Dressing.

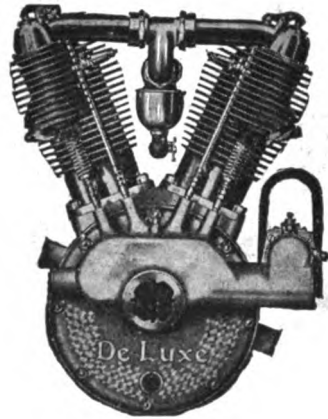
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Silent
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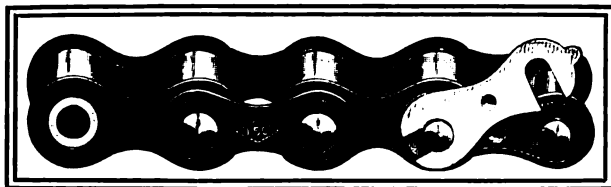
Powerful
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All That Its Name Implies
The DeLuxe Motorcycle Motor

FOUR SIZES

The F. W. Spacke Machine Company
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**No. 150
DIAMOND CHAIN**



**A STRONG, SAFE CHAIN FOR
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A chain with each part so accurate that long life under hard service is assured.

A chain that will take you through sand or mud or up the steepest hill in all kinds of weather.

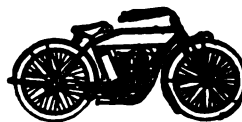
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TRADE  MARK
ON EVERY LINK

DIAMOND CHAIN & MFG. COMPANY
CHAIN MANUFACTURERS FOR 22 YEARS
E. GEORGIA ST. INDIANAPOLIS, IND.
CAPACITY, 8,000,000 FEET PER YEAR

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**THIS IS THE
TIME TO BUY
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AT 1/4 to 1/3 THE PRICE WHEN NEW

We specialize in selling standard makes of motorcycles and automobiles in slightly used condition.

Large assortment of used motorcycles, single, two and four cylinders; chain, belt or shaft driven—Indian, Pierce, R-S, Excelsior, Curtiss, F. N., N. S. U., M. M., Harley-Davidson, Thor, New Era, Merkel and other high-grade makes from \$35 up.

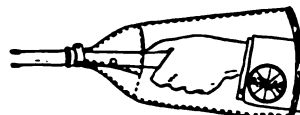
Practically all styles and makes of automobiles at \$100 up.
We guarantee each purchase to be in perfect running condition.

Agents wanted everywhere. Write for price lists and descriptions.

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NOW IS THE TIME TO STOCK UP

With Atlas Fur-lined Hand Windshields and our other Cold Weather necessities.



We manufacture a complete line of Leggins, Magneto Covers, Luggage Carriers, Tail Lamps, etc.

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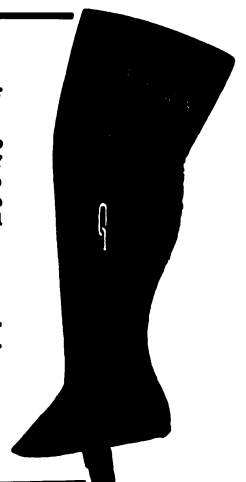
Leather Leggins, \$1.00 per pair and up.

Jobbers and Dealers get our proposition. Write for our up-to-date Catalog.

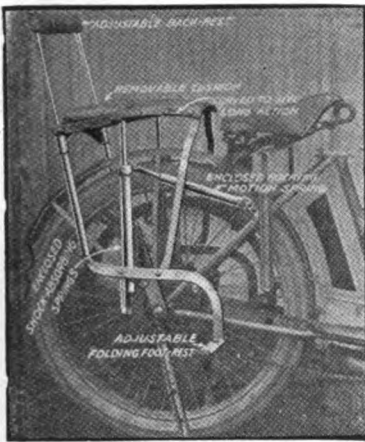


Atlas Specialty Mfg. Co.

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THE "STOLL DREAM" TANDEMS

THE EASIEST RIDING TANDEM IN THE WORLD

—Patented—

A FEW FEATURES:

Adjustable folding footrest. Artistic design and finish. Rocking Motion, making Back-rest comfortable over the roughest country roads. "Just floats along." Back-rest can be raised or lowered instantly while riding.

DROP US A CARD AND LET US TELL YOU MORE ABOUT THEM
GOOD PROPOSITION TO DEALERS. FITS ANY MACHINE

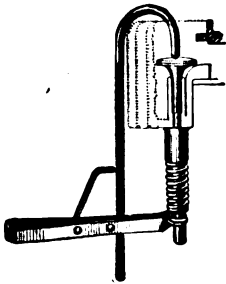
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INSURE A GOOD COMPRESSION—ALWAYS

It is important, if you want all the power your motor generates, to keep your valves in condition. An occasional grinding keeps your compression at its most effective point. For cleaning and grinding your valves the

Simplex Exhaust Valve Remover

is the only tool that can be made to readily fit all machines. It is the most convenient little appliance on the market—a repair shop necessity.

PRICE 50c.

Liberal discounts to jobbers and dealers. We also make the famous Simplex Side Cars and the Simplex Magneto Out-out. Write for our booklet.

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Enemies of Friction

Why don't you "Standardize"?

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Philadelphia

A Porcelain Motorcycle Spark Plug!

Made for Motorcycle Service Only

No need any longer to use the inferior mica plug or a makeshift porcelain. This new Motorcycle Standard Spark Plug, built by the greatest manufacturer of spark plugs in the world, gives motorcycle riders a plug with a porcelain insulator that is faultless, defies heat and insures perfect ignition.



\$1.00

Comes in half-inch or metric sizes. Your dealer will supply you—or sent prepaid on receipt of price and size.

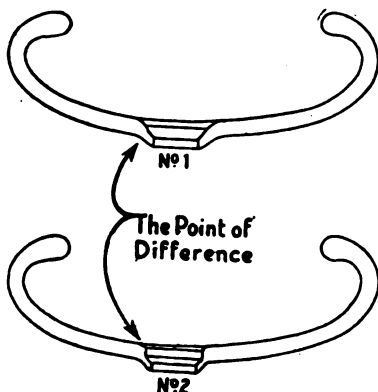
PRICE—\$1.00 per plug

Our guarantee—"Your money back or a new plug, unless you are absolutely satisfied."

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Mott Rims for Strength

THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

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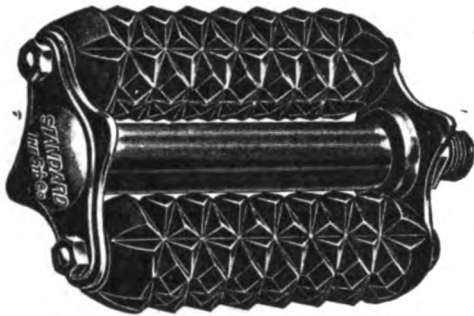
THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

MOTT WHEEL WORKS, Utica, N. Y., Manufacturers

R. B. ABBOTT SALES CO., Sales Agents, Majestic Bldg., Detroit

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Keep your feet always on the Pedals



The deep rubber corrugations in the big cushions on

STANDARD PEDALS

keep the feet in the proper position. When going over rough roads, the constant jarring and bumping makes it very uncomfortable for the rider who cannot make his feet stay "put"—not to mention the fact that he cannot readily use his brake.

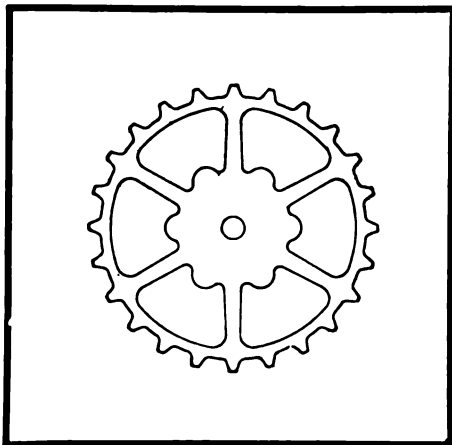
STANDARD PEDALS insure the utmost comfort for the feet. They have been in consistent use by the majority of motorcycle manufacturers for many years, and you can have them on your motorcycle if you insist on Standard Pedals.

Dealers—send for electrotypes and description of our line. It is well worth handling.

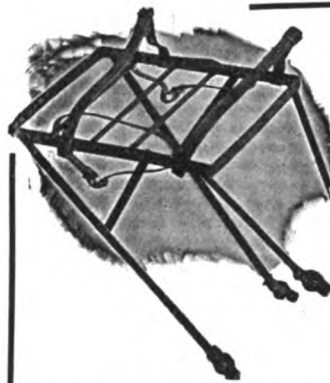
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SPROCKETS



Hydraulic Pressed Steel Co.
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Dealers! Riders!

Here's the ideal luggage carrier. Built scientifically—can withstand considerably over two hundred pounds weight. Just the thing for tandem riding. Adjustable to all motorcycles.

The "Star" Luggage Carrier

is sold by the leading jobbers in the country. Write for our catalog.

Star Electric Co., 18 No. May St., Chicago, Ill.

Afford Perfect Traction— Prevent Slipping and Skidding

Mud, sand, slippery pavements or snow will not spoil your sport if you always carry Weed Chains.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write Dept. B for particulars

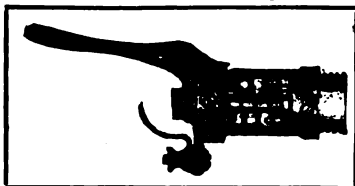
Weed Chain Tire Grip Co., 28 Moore St., New York

WEED ANTI-SKID CHAINS FOR MOTORCYCLES



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Patented in Europe



Patented in America

SPEED With Economy

The M&M requires a 1/4" pipe tap to insert into manifold. It is made with six portholes, which when open, admits auxiliary air into the manifold.

The M&M Economizer will save you from 40 to 50% of gasoline, and will give you 20% more speed and power with less gasoline and less carbon.

It is the only known carburetor adjuster on the market. Do not throw your old carburetor away, before you have tried our device. **THEN NOTICE RESULTS.**

It is great for priming the engine. When going down grades, it cuts off all gasoline and ignition.

PRICE \$1.25 PREPAID.

The M&M is a nickel-plated device, highly polished, and it is positively air-tight when closed.

Guaranteed to give satisfactory results.
Money refunded in 30 days if unsatisfactory.

BEWARE OF INFRINGEMENTS.

Send for full information
and our latest catalogue.

MOLLER BROTHERS CONTROLLER AND ECONOMIZER CO.

AMERICAN OFFICES, 700 Betz Building

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Motorcycle
IMMEDIATE



Specialties
DELIVERIES

Simplex Spring Tandem Attachments
A-H Spring Combos
A-H Remproof Riding Outfits

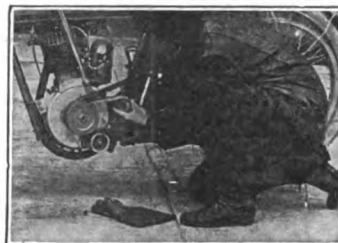
A-H New Type Luggage Carriers
A-H Axle and Stand Extensions
A-H Lamp Brackets
A-H Axle and Special Hubs

A-H Spring Luggage Carriers
A-H Fabric Pulley Luggage
A-H Auxiliary Air Valves

CORRESPONDENCE SOLICITED—PROPOSITION GOOD

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MAKERS OF
GOOD SPECIALTIES
CHICAGO

ARE you troubled with belt slipping, Mr. Rider? Do the screws in your lagging cut grooves in your belt? We can overcome this for you, also prevent your belt from getting glossy. The only cure today is



ABESTO
PULL-E-TAPE

Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape, 50c per Roll—send for some today and save your belt. State width.

KRAFT KNITTING COMPANY

150 EAST EXCHANGE STREET

AKRON, OHIO

The New "N. A." BREEZE

Delivers a larger volume of properly mixed gas than any other motorcycle carburetor in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

At over 3,500 revolutions it is just as effective.

All air ports have been enlarged.

A perfect mechanical device to increase gasoline supply automatically with the opening of the throttle has been fitted.

Send for free catalog. Our Engine Trouble Text Book, 54 pages, will be mailed for 10 cents.

BREEZE CARBURETOR CO., Newark, N. J.



SPLITDORF

"Always There"

SPLITDORF PLUGS are gas-tight, soot-proof and unbreakable and never need monkeying with. Insist upon **SPLITDORF**—they are **STANDARD**.

Write for new catalog

SPLITDORF ELECTRICAL CO.

98 Warren Street, Newark, N. J.



The Neverout
TRADE MARK

Gas Lighting
Outfit

FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name NEVEROUT in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the NEVEROUT motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

ROSE MANUFACTURING COMPANY

933 Arch Street, Philadelphia, U. S. A.



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MOTORCYCLE MART

One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

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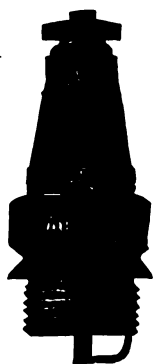
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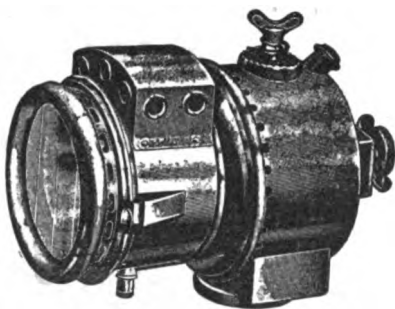
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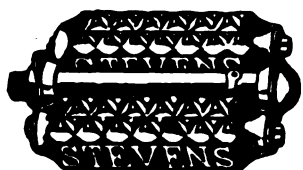
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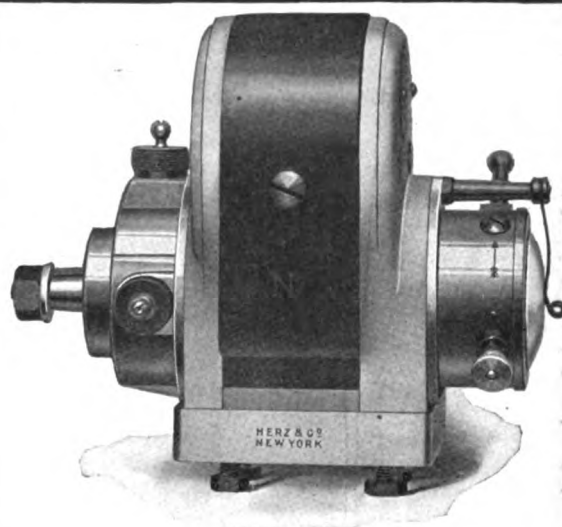
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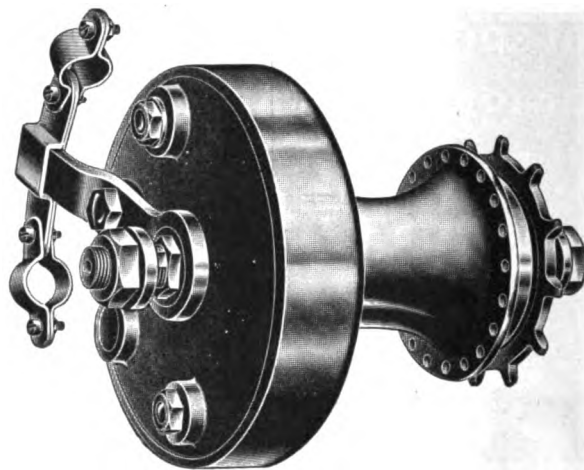
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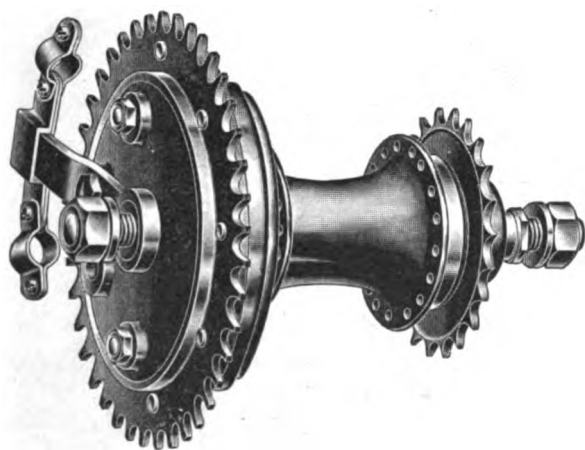


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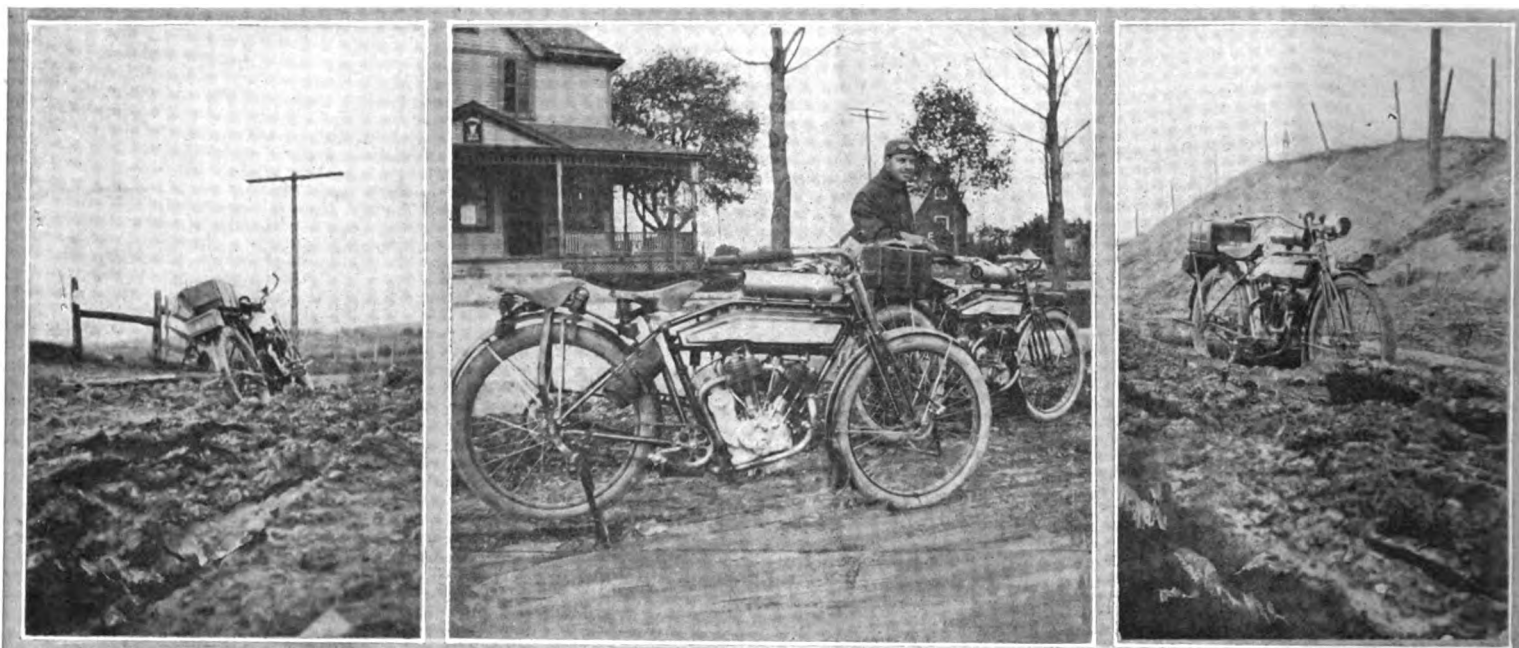
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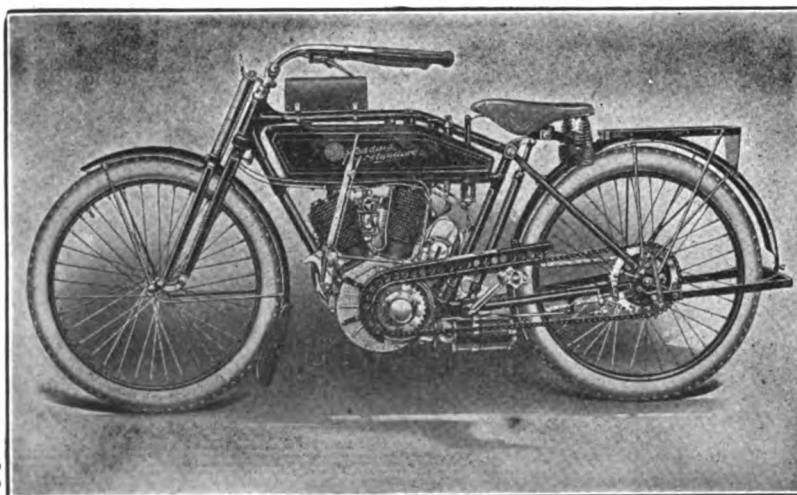
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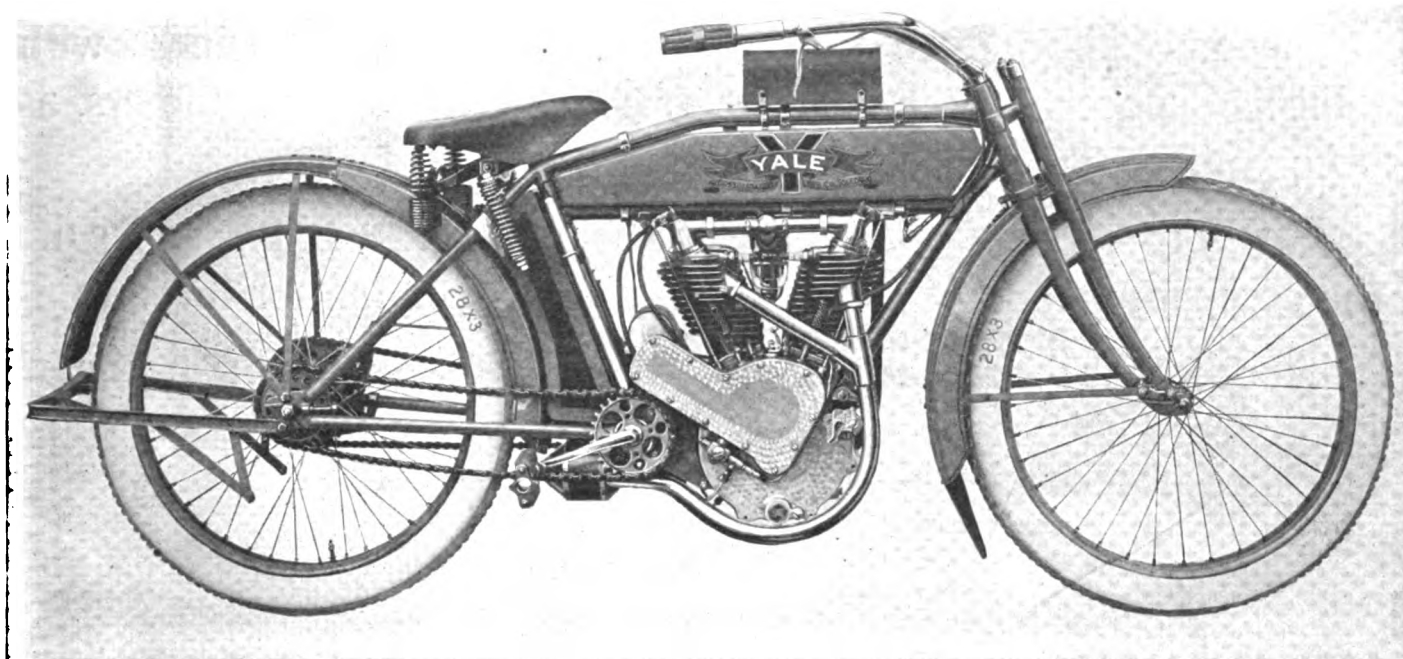
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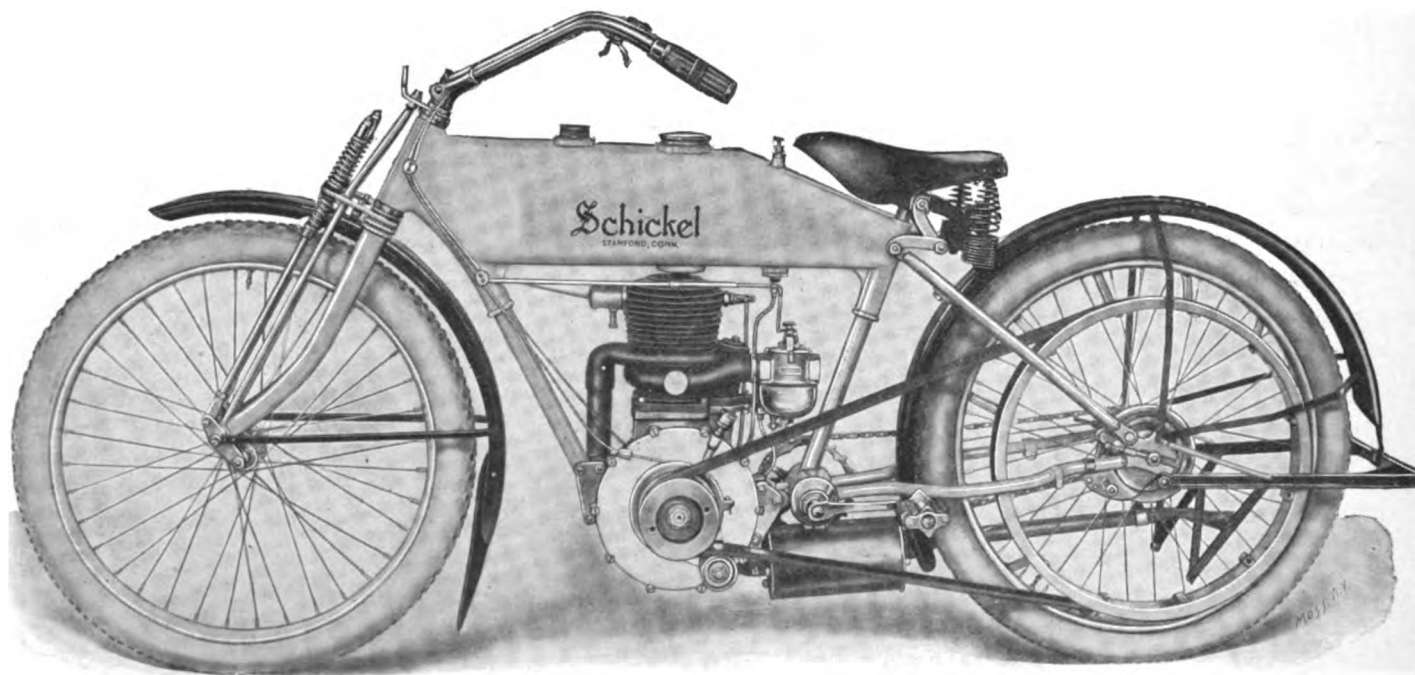
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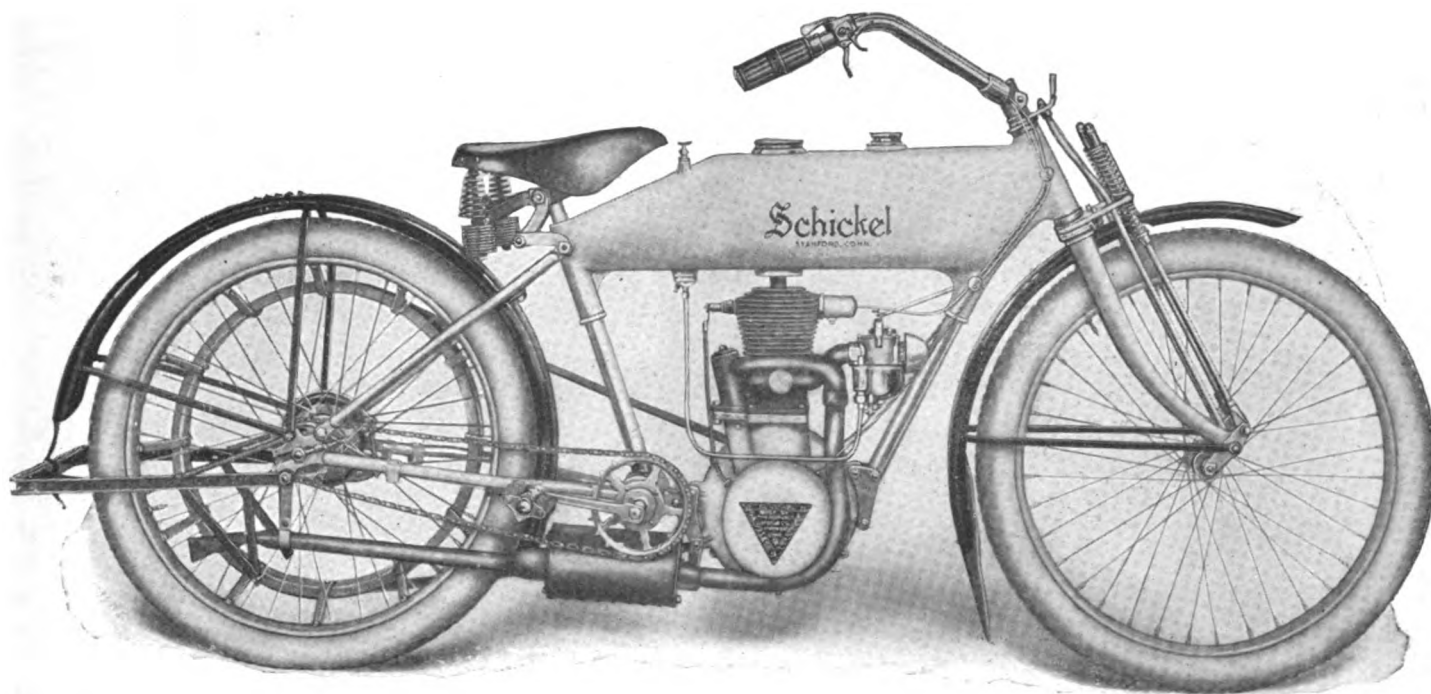
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THE FIVE-HORSEPOWER SCHICKEL BELT DRIVE



SPECIFICATIONS

FOR

Five-Horsepower Model and Big Six

Bore 3 3-8 in.

Bore 4 in.

Motor—Schickel Valveless Two-Stroke all ball-bearing motor.

Control—Twist grips operate throttle and free engine. Separate levers used for spark control and compression release.

Frame—Schickel Unit Tank Frame and reinforced seamless steel tubing.

Forks—Schickel Tension Spring Forks.

Transmission—1 3/4" flat belt or 5/8" pitch roller chain.

Brake—Corbin Band.

Ignition—High tension magneto completely enclosed in oil proof, dust proof and water proof case. Spark controlled by rocking magneto field.

Wheel-base—57".

Tires—28" x 2 3/4" Goodyear Studded Tread.

Tank—Formed in upper frame member. Capacity 3 gallons.

Oiler—None.

Oiling System—Schickel Oiling System—oil mixed with gasoline in fuel compartment.

Compression Release—Enclosed Mushroom type valve operated by Bowden wire mechanism.

Speed—Five to fifty miles an hour.

Saddle—Troxel.

Color—Schickel Gray with black enamel mudguards.

PRICES

5-Horsepower—Belt Drive, \$225.

5-Horsepower—Chain Drive, \$230.

Big Six—Belt Drive, \$235.

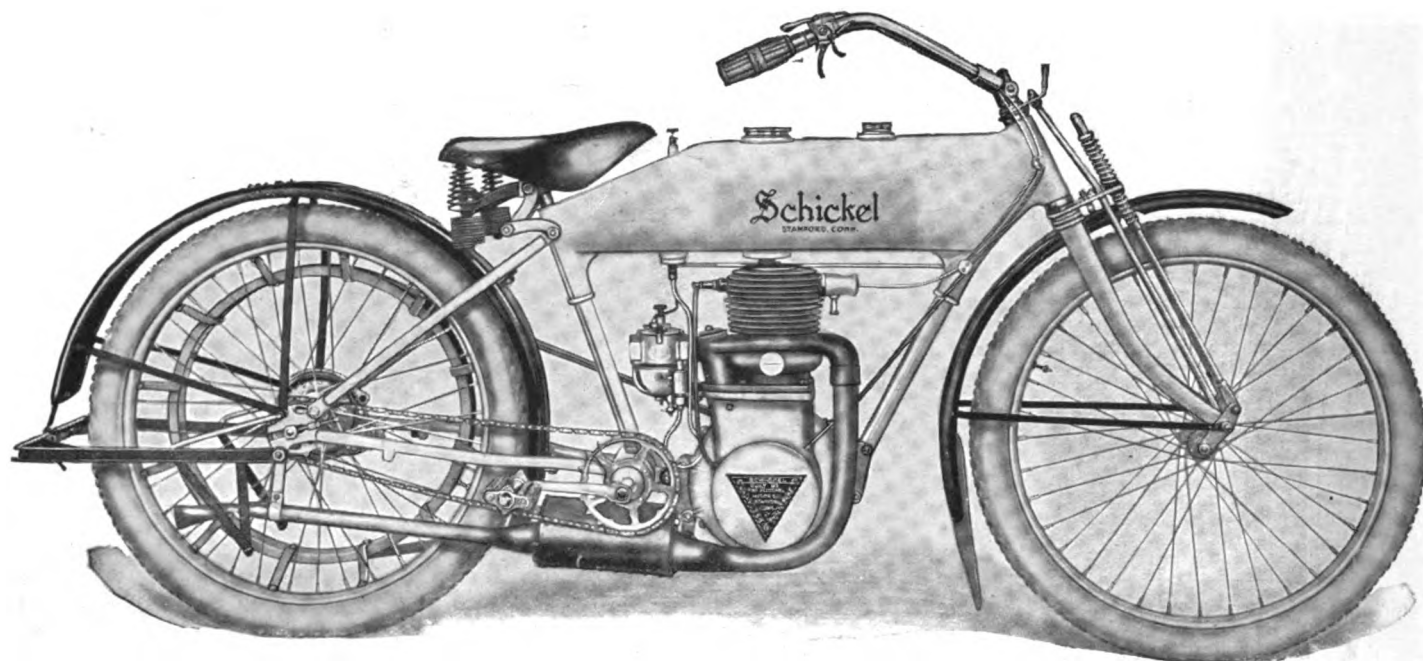
Big Six—Chain Drive, \$240.

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The Schickel Big Six (Right Sideview)



The Schickel Big Six

Handles as easy as a light four—Hauls like a high-powered Twin—Without the disadvantages of either

The Schickel Big Six embodies a splendid combination of power and comfort. Embracing as it does all of the previous year's proven features of the smaller Schickel, riders who want plenty of power without sacrificing comfort or ease of control will find complete satisfaction in the ownership of the Schickel Big Six.

SPECIFICATIONS

Excepting the motor, the specifications for both the five-horsepower model and the Big Six are identical.

(See previous page)

Our Message To Dealers

There will be a few cheap motorcycles sold the coming season but only a very few. Serious thinking dealers have done with cheap trade. The profit is small and the worry great. When the price of a machine runs much above the average the dealer must be willing to cut down his prospect list to a chosen few. The Schickel is not a cheap machine nor is the price beyond the pocket of many prospects. The dealer who handles the Schickel talks quality first and price afterwards. His business is his pleasure—he deals with first-class trade, makes a fair profit on each machine sold and has a live prospect list—because quality is in the Schickel motorcycle and the price appeals to a large field of buyers.

Are you interested in securing a quality line that sells at a reasonable price?

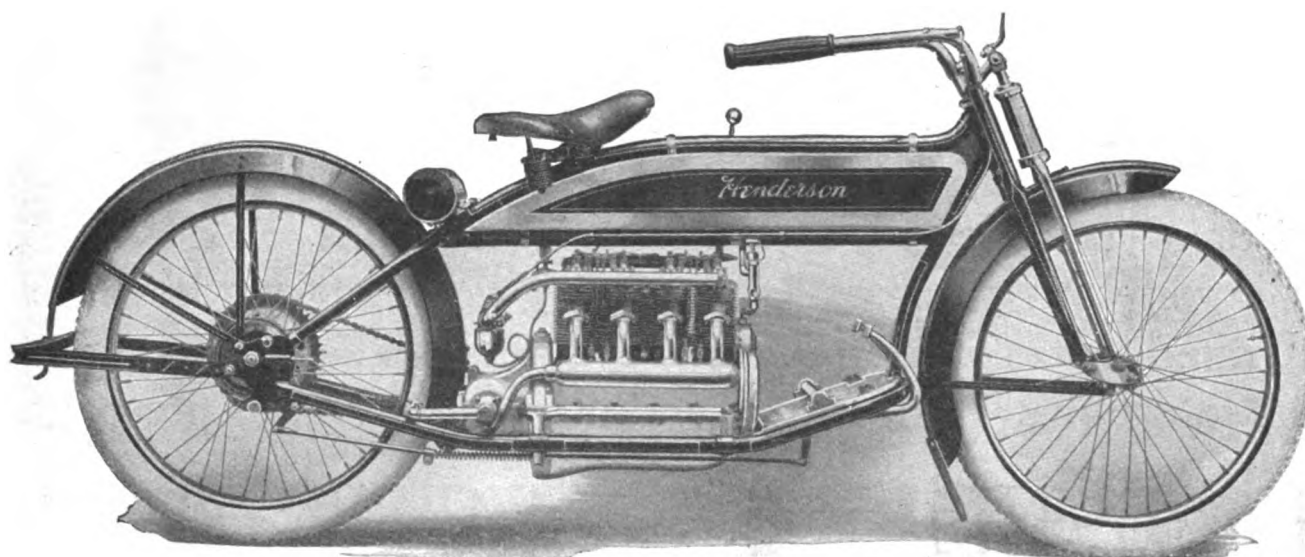
We can make a good proposition to live dealers. Applications invited.

The Schickel Motor Company, 59 Garden Street, Stamford, Conn.

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Dealer and Rider Alike Have Abounding Faith in the Henderson



The 1913 Henderson, 8 H. P., 4-cylinders, \$325
 free engine, chain drive

Schebler Carbureter, Bosch Magneto, 60-degree range, 3-inch Tires, External Band Brake

In its first year The Henderson made a permanent place for itself in the regard of motorcycle dealers and buyers alike.

Its power—increased for 1913—its flexibility, its comfort, its positive chain drive, made possible only through the use of four cylinders—its silence, the absence of vibration and its smooth

riding, were new features in the motorcycle.

They have proved themselves worthy of the confidence the Henderson engendered on its first appearance.

And this confidence has spread; it has become almost a cash asset for the dealer handling the Henderson.

Are you one of them?

HENDERSON MOTORCYCLE COMPANY, 1158 Cass Avenue, DETROIT, MICH.

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We hereby notify all Manufacturers, Jobbers, Dealers and users of Bicycle Tires that we will enforce our rights to the exclusive use of Trade-Mark shown below.



For a great many years we have used this Trade-Mark in connection with our Bicycle Tires and have registered same in the United States Patent Office. No licenses have been granted others to use this Trade-Mark, and infringers will be prosecuted.

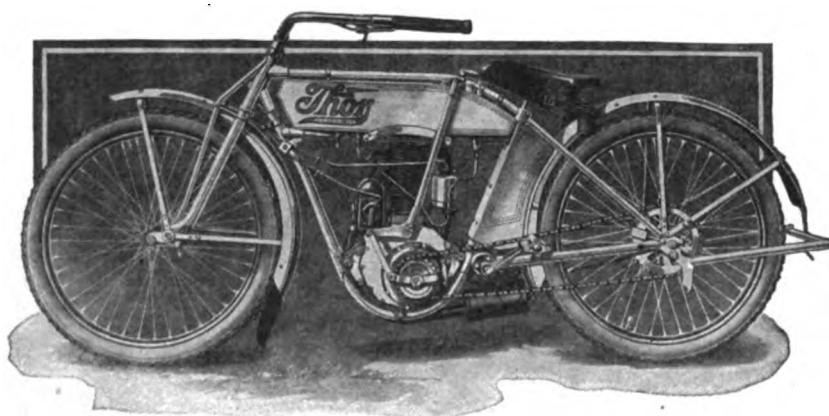
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Thor Originators of Chain Drive Motorcycles

Immediate Deliveries on this Wonderful 4 H. P. Model

A Motorcycle is judged by results. That is where **Thor** Quality Counts.

Mechanically oiled by **Thor** Perfection Force Feed Mechanical Oiler.



MODEL 13M \$225.00

With two-speed attached—\$265.00

This 4 H. P. Model is the fastest single cylinder ever manufactured—faster and more powerful than our previous models of same size.

Write today for advance catalog and agency proposition.

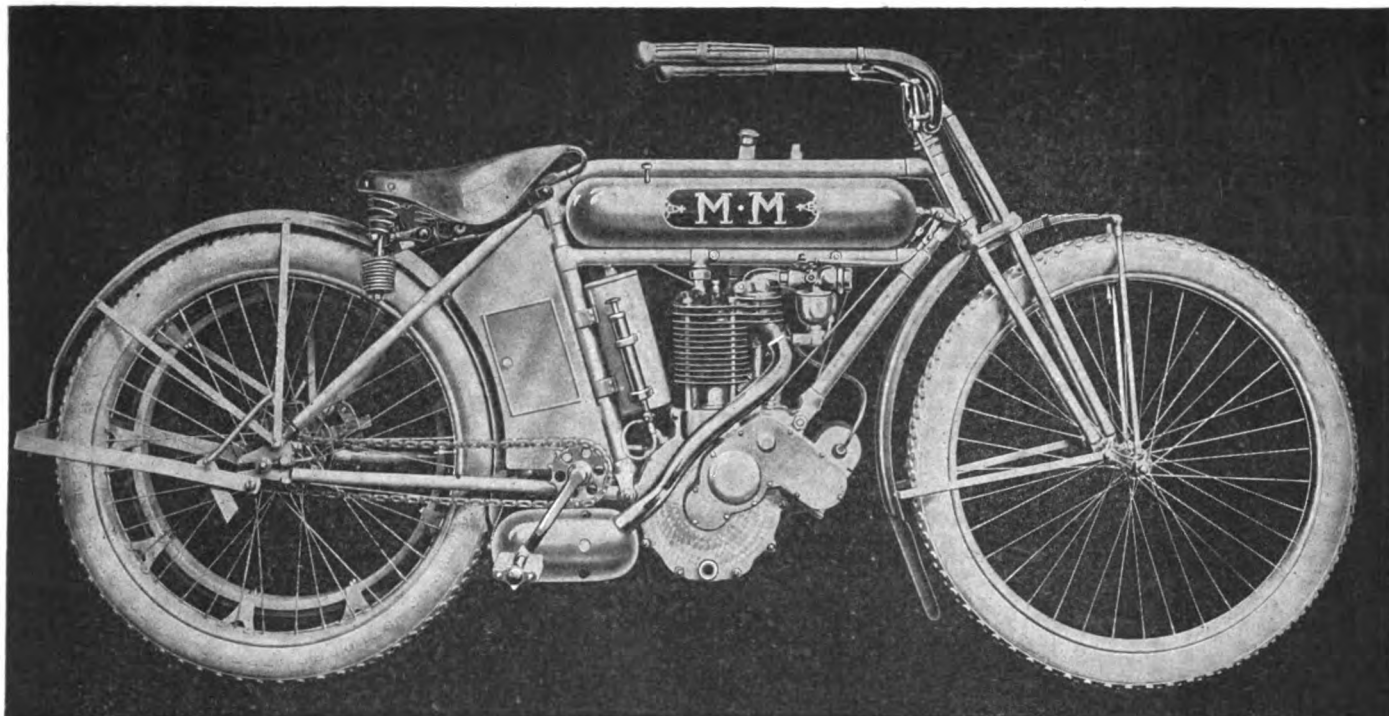
The Motorcycle without a Mechanical defect, as proven by long series of tests and thirteen years' experience.

Undergeared Internal gear, direct chain drive transmission and **Thor** Improved Clutch.

AURORA AUTOMATIC MACHINERY CO.

General Offices: Thor Bldg., 1307 Michigan Ave., Chicago, Illinois. Works: Aurora, Illinois.

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**The Latest and
Best Single Offered**

M·M

**1913 Four-Fifty
Model, \$200**

¶ The essence of all that is good in motorcycle construction. Built solid and husky at every point subject to strain, at the same time retaining the graceful lines and neat appearance for which this model has always been famous. Study the cut and compare the design with any Single yet announced.

**ROLLER BEARING, LONG STROKE MOTOR
BOSCH WATERPROOF MAGNETO
ECLIPSE FREE ENGINE CLUTCH
SCHEBLER CARBURETER**

¶ Over 20 new improvements, covering cylinder, piston, rings, wrist pin, frame, fork, roller bearings, magneto, brake, new finish, muffler, tool box, handlebars and grip control.

¶ Send for new advance circular, just off the press, describing these improvements in detail on this model, and also the big, powerful M-M Twin, the Smoothest Running motorcycle ever built, \$240.

¶ **Dealers**—Get busy with your pencils. Apply for territory before the other fellow gets it.

American Motor Company

716 Center Street

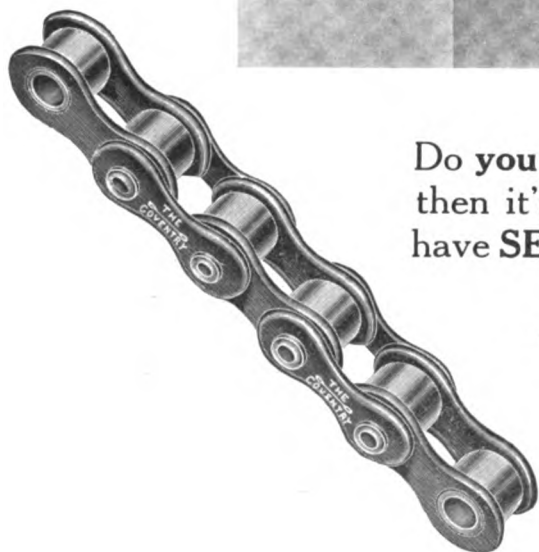
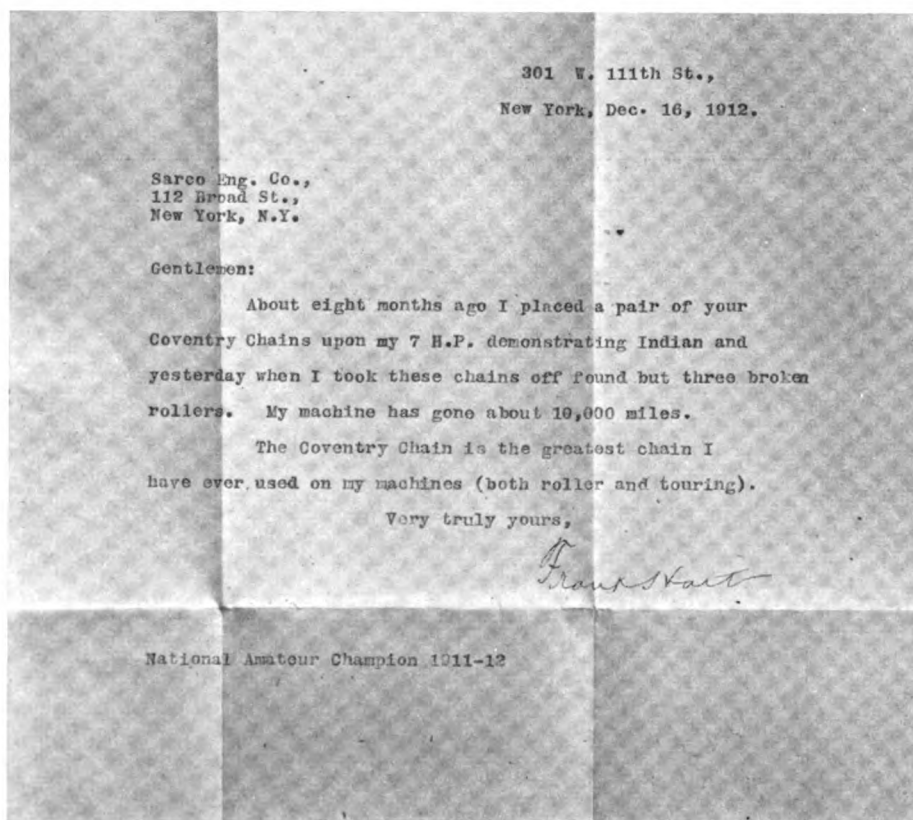
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**“Ten Thousand Miles
with ‘The Coventry’
Chains and only three
broken rollers”**



Do **you** get this kind of service from your chains? If not, then it's up to you to learn more about the chains that have **SERVICE** built into, over, under and around them—

“The Coventry” Chains

Dealers—Get our catalog

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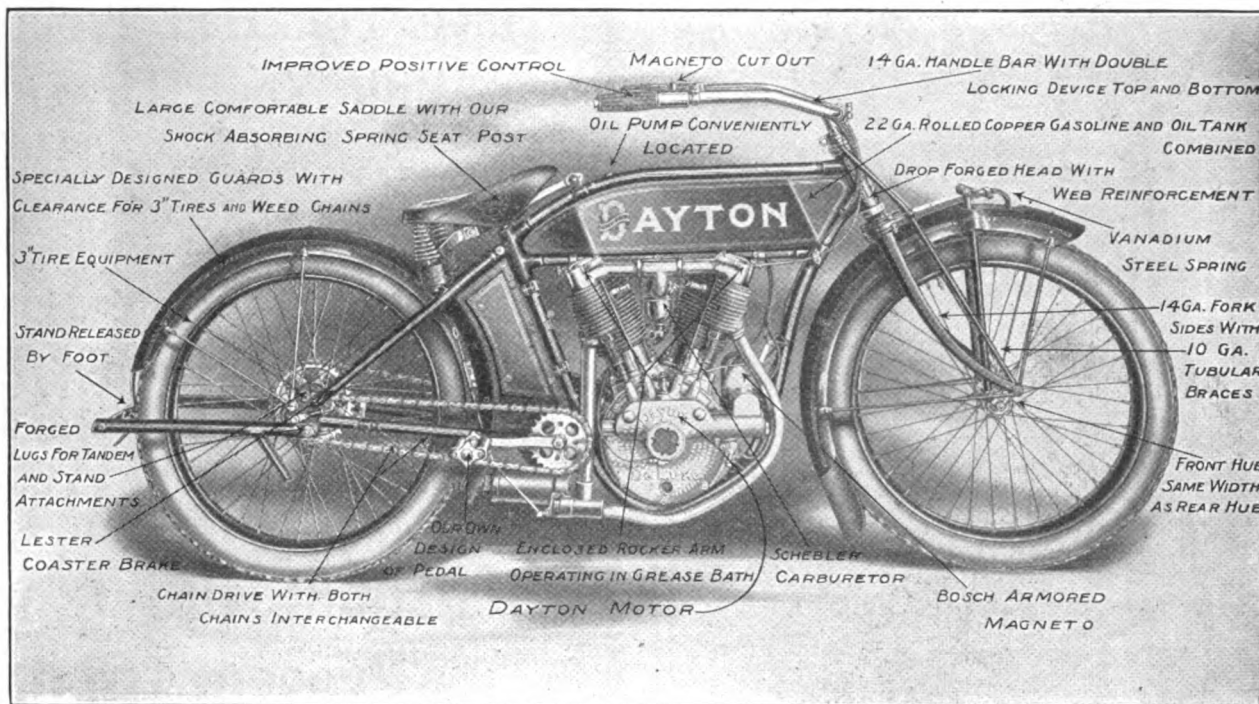
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DAYTON



1913 WILL YOU SPEND OR INVEST IT?

As a Motorcycle Dealer you will employ 1913 in one of two ways:

ONE WAY—You will **spend** your days (and nights) trying to induce the motorcycle buyer to purchase a machine he doesn't want—one that doesn't appeal to his tastes or satisfy his needs. You will work long and hard and **Spend 1913 for Slim Returns.**

OR

ANOTHER WAY—You will **invest** 1913 offering the motorcycle buyer the machine that meets his every need—the machine he feels was built for him—in short, the motorcycle he wants. Your **Investment** will yield a **Handsome Profit.** That is The Dayton Way—

DECISIVE ACTION NECESSARY

If you want to **Invest 1913** and **Get Returns** write us and return mail will bring our 1913 Catalog and full particulars.



THE DAVIS SEWING MACHINE CO.
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DAVIS SEWING MACHINE CO., DAYTON, OHIO. ^(MT)

I am a motorcycle dealer and interested in your DAYTON proposition. 'Send me particulars.

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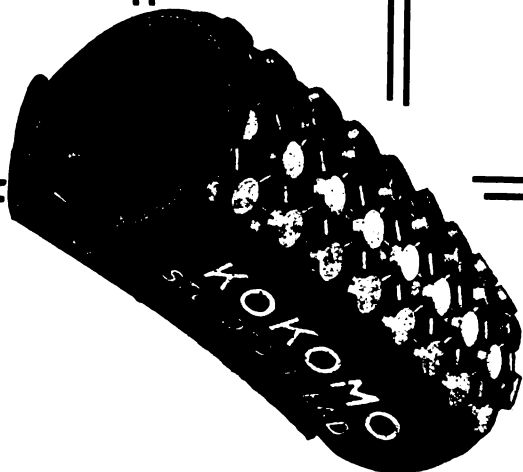
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DAYTON

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KOKOMO TIRES represent the highest achievement in tire construction. Sixteen years of tire manufacturing experience are back of them, and the best, and only the best, of material and workmanship goes into their make up. The result, proven by many tests, is that Kokomo tires are

Low Cost }
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KOKOMO

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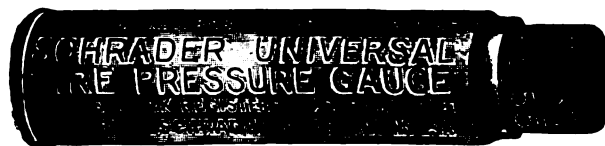
Have You Had Trouble With Your Tires?

A very large percentage of all punctures and blow-outs occur from improper tire inflation.

WOULD YOU PAY \$1.00 TO OVERCOME

delays, difficulties and expense resulting from these misfortunes?

Schrader Universal Tire Pressure Gauge



(Made under patent dated March 1, 1898.)

Accurately registers at all times the exact air pressure in tires.

Simply hold gauge to tire valve for a second and recording sleeve will indicate air pressure and remain fixed until pushed back into place by the finger.

Carried easily in vest or change pocket, being only 2½" long. So simply constructed as to almost never become out of order, and if it does go wrong it will immediately tell by the action of the indicating sleeve that it needs repairs. Leather case comes with it.

PRICE \$1.00 EACH

Guaranteed Simple and Absolutely Accurate

Can be obtained from all tire manufacturers, jobbers and dealers, or

A. SCHRADER'S SON, Inc.
28-30-32-33 Rose Street NEW YORK CITY

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INDICATOR
ESPECIALLY
BUILT FOR
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MAKE YOUR
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COMPLETE
WITH A

Model 831 — \$20

JONES Speedometer

Every motorcyclist likes to know his speed, the distance of his trips, and season mileage. The JONES SPEEDOMETERS, built for motorcycles, contain all the features and refinements of our speed-indicators for automobiles, and at the same time are especially constructed to withstand all vibration. Easily and quickly attached to any machine. Unequalled for service, excels every other indicator for accuracy. The JONES SPEEDOMETER is the instrument for *your* motorcycle.

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The United States Tire Company

wishes each and every motorcyclist
and dealer in the country a

Merry Christmas

and a New Year so filled with
happiness and prosperity that at its
close he can say from the bottom
of his heart

Tire-by Satisfied,



MOTORCYCLE

ILLUSTRATED

51 CHAMBERS STREET,
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PAID CIRCULATION MORE
THAN 12,000 COPIES
PER ISSUE.

PLANS FOR F. A. M. AND TRADE MEETINGS

Special Session of Federation Directors Proposed for Show Week to Consider Several Important Matters.

SEVERAL of the directors of the F. A. M. have requested President Patterson to issue a call for a special meeting of the Board to be held in New York during the week of the Show. It is probable that the session will be called to order in the office of the Chairman of the Legal Action Committee at 51 Chambers street on Wednesday, January 15, at 9 o'clock in the morning. It was the original intention of the directors not to meet until the week of the Chicago Show, but since the St. Louis meeting in November a number of matters which require immediate attention have come before the Board.

The directors are now voting by mail on a proposal to send one of their members either to the coast or on a general tour of some thirty-five States to preach the gospel of the organization, to explain its workings, to help organize the various State governments and give hearings on disputed matters. It is probable that President Patterson will announce the result of this vote in the course of a few days.

The Touring Bureau is sending out to the various directors a set of fifteen touring books, each containing twenty-five maps, the plates for which can be purchased by the organization at a comparatively low price. The Bureau is also in touch with the American Automobile Association with a view to making special arrangements to furnish the latter's maps to F. A. M. members at discount rates. The Board will be asked to determine which of the several touring propositions to accept, with a view to permitting the Touring Bureau to be in position to give members satisfactory service as soon as the riding season opens.

Members of the Board have requested the New York meeting because of their wish to bring about immediately a better understanding between the president, secretary-treasurer and chairman of the Competition Committee. The directors are of the opinion that the organization has been handi-

capped to a certain extent by the disposition of some of its officers to rush into print, instead of trying to settle their private differences of opinion in a more sensible way. It is only natural that on controverted questions the officers of any organization should now and then hold contrary views. It has been the experience of the Board, however, that problems which seem almost unsolvable through correspondence are easily disposed of when the directors meet man to man. As a matter of fact, none of these questions are of vital importance, although their exaggeration has undoubtedly created a mistaken impression in some quarters.

The New York meeting will be well attended, as the correspondence of the directors shows that they are desirous of clearing the boards for a record-breaking New Year.

FREIGHT RATE HEARING.

IT is announced that the case of the Motorcycle Manufacturers' Association vs. the Baltimore & Ohio Railway Company, et al., has been set down for argument at the office of the Interstate Commerce Commission in Washington, D. C., at 10.30 a. m. on January 8. Arrangements have been made to have the motorcycle manufacturers suitably represented, and there are indications that the long-delayed decision on motorcycle freight rates will be forthcoming, and that it will be distinctly favorable to the complainants.

NEW DIRECTOR NAMED.

AT a special meeting of the stockholders of the California Motorcycle Company, held in Los Angeles, Monday, December 2, E. J. Spaulding retired from the Board of Directors of the company and Barton Brown was appointed to succeed him.

MOTORCYCLIST'S SUDDEN END

J. M. McGRANAHAN, known as the champion motorcyclist of Oklahoma, died December 12 at a hospital in Oklahoma City, following an accident. While speeding on his machine at a rate of more than 60 miles an hour he suddenly encountered an automobile coming from a cross street and, in order to avoid a collision, turned into a ditch.

Busy Meetings Will Feature Show Week in New York and Trade Boosters Will Enjoy Luncheon.

THAT show week in New York City will not have to draw all its interest from the fine array of machines and accessories in the big exhibit, is evident from recent reports concerning meetings for which arrangements have been made. In addition to the midwinter session of the Motorcycle Manufacturers' Association, which is scheduled for the Hotel Breslin, January 15, the annual meeting of the Cycle Parts & Accessories Association will be held at the Hotel Astor, on January 16, at 10 a. m. The National Association of Cycle Jobbers, organized to replace the old association which was dissolved about a year ago, will also hold a meeting at the Hotel Astor, coincident with the Cycle Parts & Accessories session.

Following the meetings the Cycle Parts & Accessories Association will tender a luncheon at the Astor to the Motorcycle Manufacturers' Association and the bicycle manufacturers, and to the representatives of the National Association of Jobbers. Arrangements for the luncheon are being made by a committee composed of Vice-president David B. Smith, Treasurer W. J. Surre and DeWitt W. Page, and it goes without saying that the program will meet all expectations.

The election of officers for the year will be one of the features of the Cycle Parts & Accessories meeting. The officials at present directing the destinies of the association are as follows: President, L. M. Wainwright (Diamond Chain & Mfg. Co.); vice-president, David B. Smith (The Standard Co.); treasurer, W. J. Surre (Continental Rubber Works); secretary, Louis Schwab (Stevens & Co.).

NEW WINONA STAFF.

AT the December meeting of the Winona (Minn.) Motorcycle Club the following officers were elected: R. E. Haesly, president; E. Buchholz, treasurer; Harry Allen, secretary; and George Nelson, road captain.

"BIG SIX" IS SCHICKEL FEATURE FOR 1913

Four Models Are Now Offered in Attractive Two-Stroke Line—The "Big Six" With Belt or Chain Drive, and the "Five" With the Same Transmission Options; Spring Seat-Post of Novel Design, New Compression Release and Other Improvements.

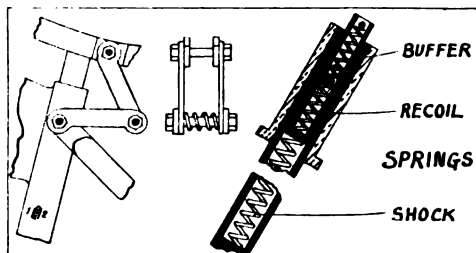
FOUR models of Schickel motorcycles will be produced for 1913, the chief being the new "Big Six," a single-cylinder type having a bore of four inches. The models are: 5 h. belt drive, 5 h. chain drive, 6 h. belt drive and 6 h. chain drive. The 5 h. motors are like the 1912 model of this product, save in a few minor details. Thus there are plugs fitted in the sides of the cylinder over the inlet passage, while the compression release device is also slightly changed, as will be described below. All models are fitted with the company's valveless, two-stroke motor.

The "Big Six" motor resembles the smaller type in the shape of its cylinder, radiating flanges, etc., but the passages for inlet transfer and exhaust are differently arranged. The carbureter is fitted at the rear of the cylinder and the inlet passage is on the left of the center line, turning toward the right before passing below the exhaust passage. The transfer passage comes upward alongside the inlet passage on the right, while the exhaust outlet is at the front, the elbow being at the right and the first portion of the exhaust pipe leading downward and then passing under the magneto casing. The compression release valve and spark plug are situated at the front and rear of the cylinder, respectively, as in previous construction.

Puddle Carbureter Fitted

The compression release valve is fitted with a hood having two ports, one at the top and the other at the bottom. These ports are for the escape of the gases, and each is formed in a short cylinder projecting inward. This arrangement traps any oil that escapes and collects it within the body of the hood, from which it can be drained off through a plug fitted at the bottom. The gases escape through the ports, and the oil is not spattered over the carbureter when the latter is mounted in

front, as on the 5 h. models. The Bowden control sheath and cable pass through the axis of the hood as in 1912 Schickel construction. Both the Six and the Five motors are mounted on ball-bearings, and have the typical Schickel single flywheel and extension-casing housing the magneto. The carbureter used for the coming season is of the puddle type, gasoline being fed from the float chamber to a shallow puddle at the bottom of the mixing chamber, from which it is combined with the primary air to form the explosive vapor. To this puddle there is fitted an overflow con-



Spring Seat Details.

nection alongside of the fuel passage from the float chamber, and a pipe at the lower end carries off the surplus gasoline below the base of the motor. On the 5 h. models, with the carbureter mounted in front of the motor, a curved shield is fitted to obviate any chance of oil splash entering the auxiliary air passage, in addition to the hood over the release valve.

Ignition in all models is by high-tension magneto, the sparking point being controlled by rocking the magnetic field in relation to the motor. The spark is thus passed always at the point of maximum efficiency no matter what the speed. This has been a feature of Schickel construction since the first motor was turned out in 1907. To the muffler is fitted

a tail-pipe whose end is twisted at right angles and flattened, giving a silent but powerful exhaust.

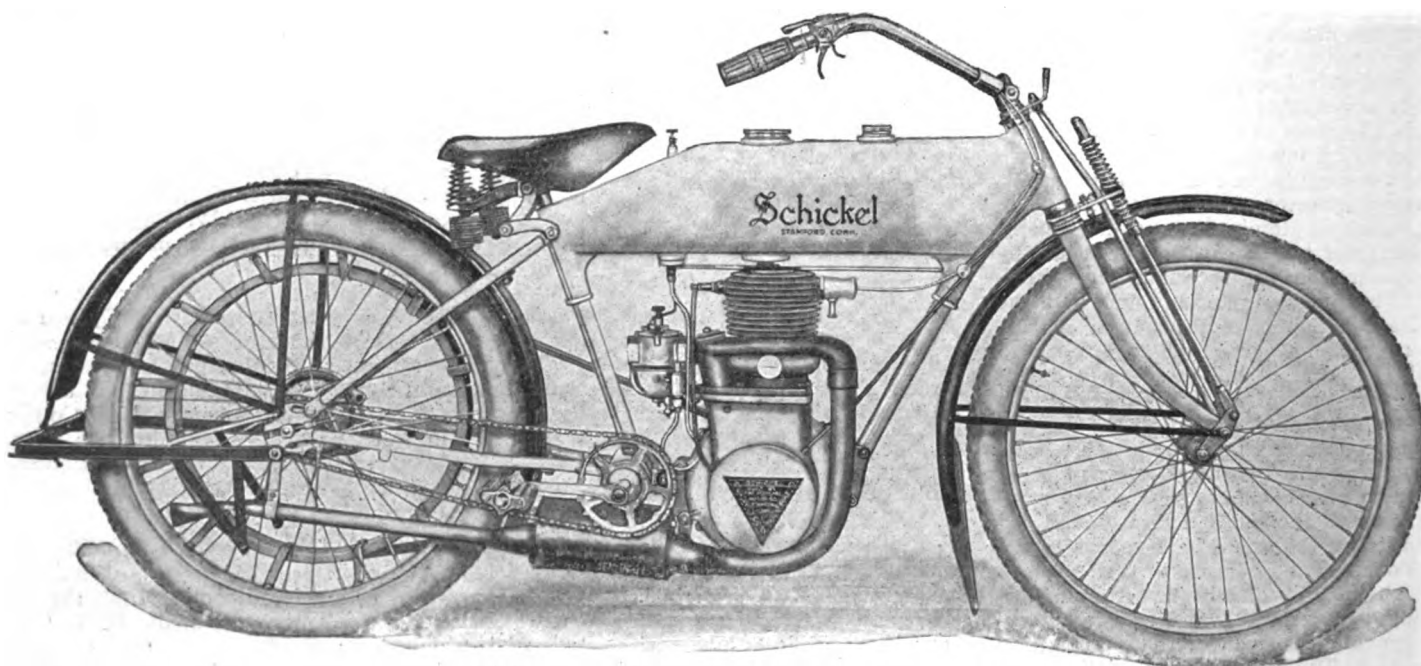
Spring Seat Post.

Transmission is by $1\frac{3}{4}$ -inch flat belt on the belt models and by $\frac{5}{8}$ -inch pitch roller chains, a double chain, countershaft drive being used. On the countershaft is fitted an Eclipse countershaft-type clutch, which is controlled by the left grip on the handlebar. On the belt models this same grip operates the idler, and the motor pulley with cork inserts is continued for 1913, it having been found thoroughly successful. All models are equipped with the Corbin band brake, operated by back-peddaling.

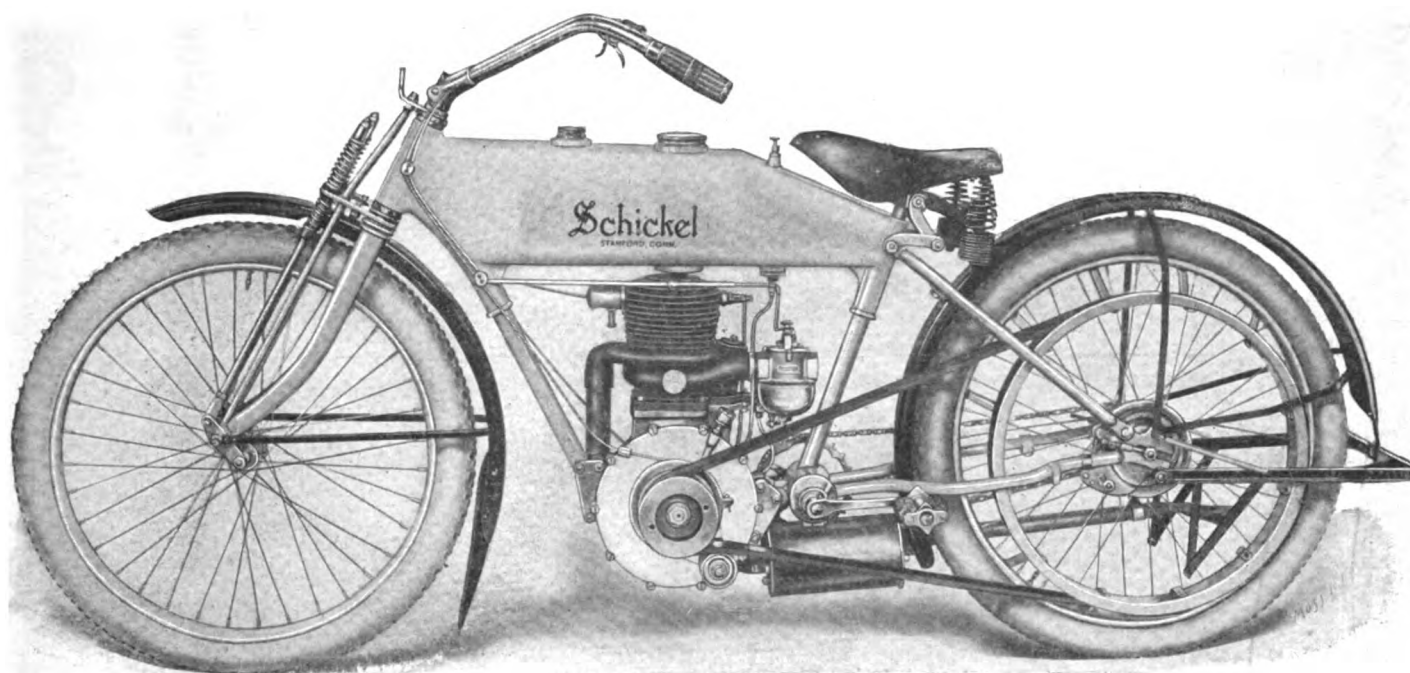
The same frame is used for all models, but compared to the 1912 product there will be a number of changes. A spring seat post is fitted, the springs being carried in the hollow seat tube. A hollow plunger carries the saddle at its upper end, and there are slots formed in opposite sides through which passes the pin carrying the ends of the rear stays at its outer ends. The upper end of this plunger is provided with a second pin, and between this and the other pin is fitted the buffer spring to check the rebound. Below the main pin is fitted the recoil spring, which is kept in position by a plug in the end of the plunger. Below the plunger itself, in the seat tube is fitted the shock spring. A linkage consisting of a pair of flat members on each side is anchored to the saddle frame and main pin at its ends respectively, and the members pivot on a common axis at the rear. There is a through-pin forming the axis, with a spring to prevent side-sway and a shock-absorbing device is fitted to the left side joint. The springing device makes it impossible to "bottom."

Other Improvements.

The front fork construction is unchanged in principle, but rubber buffers are fitted on



Magneto Side of Schickel "Big Six" Model for 1913.



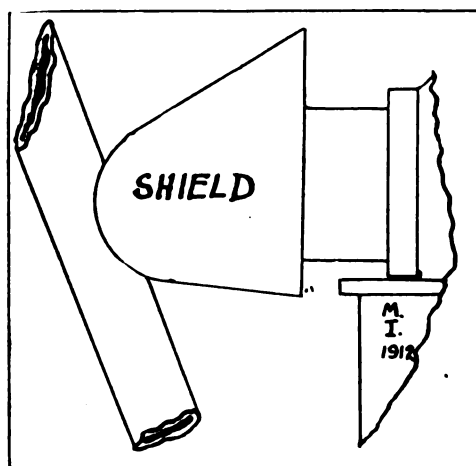
View of Schickel "Big Six" from Transmission Side.

the wheel axle extension to prevent striking of the rockers. The rear forks, crank-hanger and seat post are in one piece with the tank-frame when assembled, as has characterized this construction in the previous model. The rear mudguard is hinged, but fingers are fitted to both the stationary and flap portions, these fingers fitting on the under sides and bracing the joint when the guard is in position. The rear brace fits in a slot formed by the stand-latch extension, this brace being lifted to release the hinged flap of the guard. The latch retains the stand in a forward-facing notch so that the stand keeps the end of the guard toward the wheel, preventing rattle, etc. The stand is fitted with springs and automatically rises into the latch when not in use. A simple motion of the foot releases the stand from the latch and the rider need not use his hands to lower it. The mudguards are finished in black, as is the exhaust pipe and muffler, the color on the latter being permanent in spite of the heat from the exhaust.

The wheels are 28 inches, front and rear, with 2 3/4-inch Goodyear studded-tread tires.

The wheelbase is 57 inches and the speed range from five to fifty miles per hour. The control is that decided on as distinctive of these machines: grips for the free engine and throttle, lift lever for the compression release and horizontal lever for the spark. The tank capacity is three gallons, and the induction oil-

ing system is used, oil being mixed with the gasoline in the tank. The standard saddle is the Troxel and the color scheme is Schickel gray with black enamel mudguards, lettering, and muffler and tail-pipe.



Oil Shield on Carbureter.

The "Big Six" models are especially adapted for sidecar service or where a more powerful motor than the Five is desired for solo work.

MERZ A WINNER

IN the Thanksgiving Day "turkey run," held at Indianapolis by the Indianapolis Motorcycle Club, over a road course 65 miles long, John Merz, riding an Excelsior DeLuxe twin-cylinder machine, finished first, with Otto Sommers, on a DeLuxe single, finishing first in the class for singles, and third against the entire field. Both these machines were equipped with the well-known DeLuxe motorcycle motors.

Erwin G. Baker finished second, on an Indian. Mr. Merz' winning time was 1 hour 24 minutes 28 seconds, which beats the old record by 18 minutes and 32 seconds.

E. F. PERKINS is president of the Wilmington (Del.) M. C., William R. Jacobs, secretary, and A. E. McDaniel, treasurer.

PLUGGED SNOWY ROADS.

FIFTEEN members of the Salt Lake City M. C. recently made a Sunday run to Big Cotton Wood canyon, ploughing their way over the snow-covered roads. A special meeting of the club has been called to discuss the matter of affiliating with the F. A. M.

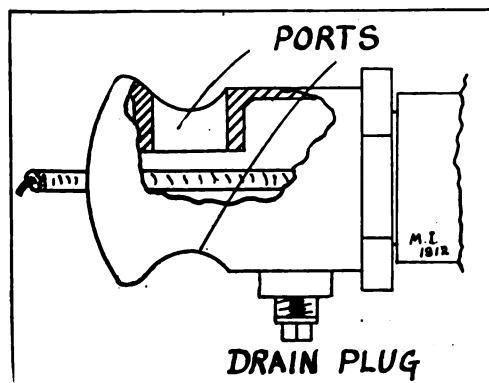
NEW COMMISSIONERS.

RECENT F. A. M. commissioner appointments are as follows: C. T. Wells, Wichita, Kan.; Hugh Scanlan, Bradley, South Dakota; L. O. Redmond, Lindsay, Cal.; Amos Meginness, San Juan Bautista, Cal.; Tony Perry, San Pablo, Cal.; Howard R. Hunter, Walnut, Cal.

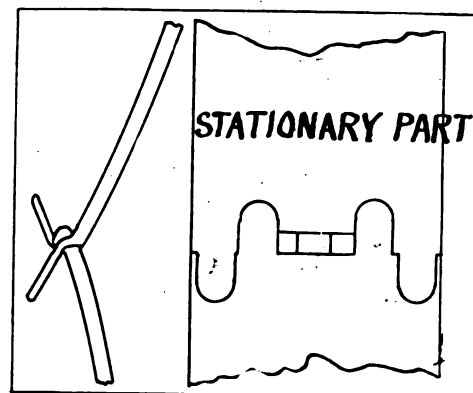
FOUR DOCTORS ON LIST

FOUR physicians are included in the membership list of the Allegheny M. C., of Pittsburgh, Pa. They are: Drs. H. L. Baker, Fred Wetzel, James Witherspoon and C. C. Boyd. "In other words," writes the club secretary, "we are prepared for almost any kind of an emergency."

SECRETARY GIBSON reports the affiliation of the Blue Island M. C., of Blue Island, Ill., and the Anderson M. C., of Anderson, Ind.



Compression Release Valve.



Locking Feature of Schickel Mudguard.

The 1913 M.M.S.

New Models Show Improved Cylinders, Pistons and Rings, More Liberal Reinforcing in Frame and Forks, Strengthened Handlebars and Other Desirable Refinements.

HAVING given the finishing touches to the models which make up its M. M. line for 1913, the American Motor Company, of Brockton, Mass., is now making a complete announcement of the specifications, supplementary to the partial descriptions of the machines which were published in October. The models will rate at 8 and 4½ h., the twin listing at \$240 and the single—known as the "Four-fifty" model—selling at \$200. Both are equipped with enclosed magneto and free engine clutch without extra charge. The twin, with its sturdy 90-degree motor, is intended for heavy service in mountainous country, for extended touring and for sidecar work. It is also an ideal machine for tandem riding. The "Four-fifty," as might be inferred, is designed for lighter service, but it is still capable of giving a good account of itself on hills and in heavy going.

There are several notable improvements in M. M. motors for 1913. The metal used for the cylinder, piston and rings is a new vanadium alloy of close-grain gray iron, which combines hardness, toughness and elasticity. It is capable of taking a glass polish, which is a material aid in resisting wear. The cylinders are cast with the flanges on in order to obtain the benefit of the tough outer scale, and the scale also remains on the inner surface of the rings and piston.

An improved process has been devised for

machining these parts, and when finished each piston and cylinder is of absolutely uniform thickness. Each piston is perfectly round—which, strange as it may seem, is not always the case—and allowance is made for less than a quarter of an ounce of variation in the weight of pistons. The gauges used in measuring the 1913 M. M. pistons and cylinders permit of a variation in diameter of only one-quarter of 1/1000 of an inch. The piston rings are cast, machined and ground separately, thus insuring a thoroughly satisfactory fit and uniform pressure in contact with the cylinder walls.

The wrist-pin in M. M. motors is hollow, and consequently light. It is ground to a fit for the holes in the piston, and is not pressed in, owing to the danger of thus forcing the piston out of round. The pin is prevented from turning by a key on both sides of one end engaging in key-ways cut in one of the piston bosses. It is kept from side motion by a cotter pin, inserted through the wrist-pin and the piston boss on the other side.

More Liberal Reinforcing

The frame tubes and joints in the new machines are reinforced more liberally than in the past, and tubing of heavier gauge has been used wherever there was the slightest sign of weakness in previous models. For example, the lower front frame tube has two D-shaped

tubes inserted throughout its entire length. The upper and lower rear frame tubes, connecting to the rear jaws, are reinforced by a piece of heavy round tubing being brazed into the end far enough to support the pressure of the rear brake arm and resist any tendency to break or bend.

The idler and clutch quadrants are attached to the truss frame bar instead of to the tank as heretofore, this construction being much firmer and also obviating noise from the vibration of the idler pulley, which was sometimes annoying with the quadrant on the tank.

Unusually heavy tubing is used for the stem of the fork in the new models, the wall being nearly ¼ inch thick. The bearing of the tube in the fork crown has also been increased and heavier gauge tubing is being used in the fork frame. A new drop forging is now being used for the side plate extensions at the axle. The spring leaves for 1913 are made of chrome silicon vanadium spring steel, a new alloy. The uprights rising from the front axle are of new design; either side can be replaced independently in case of an accident.

Greater Strength Provided

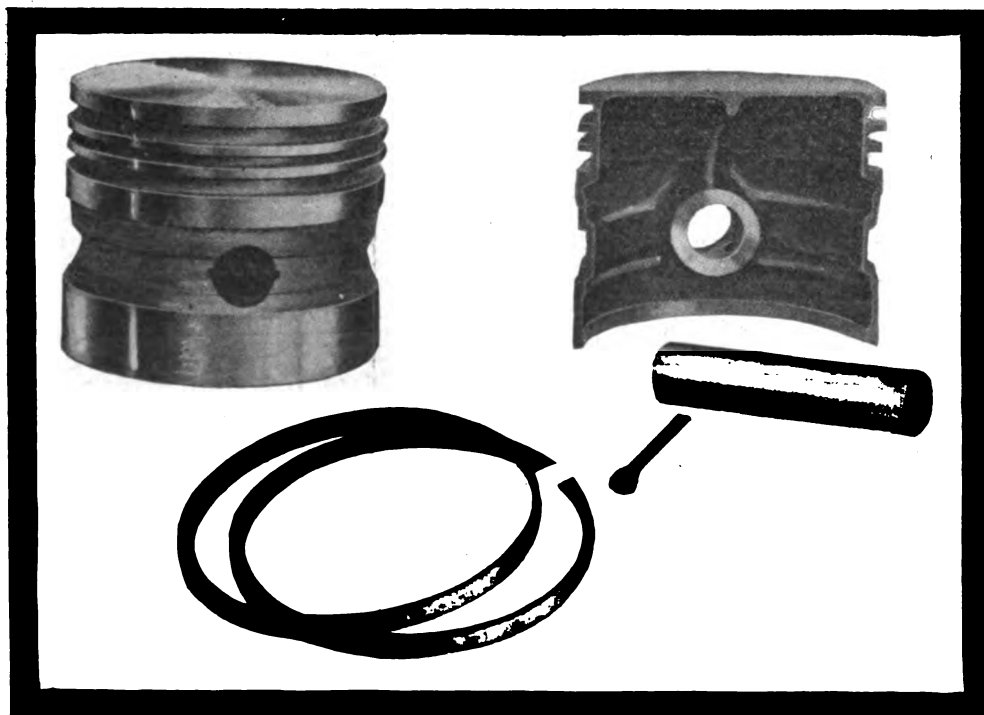
The fork tip forgings at the lower ends of the fork frame have been increased in thickness, with heavier lugs running up into the four fork-frame tubes. The stand on the 1913 models is made of stiffer metal, and the stand latch is of tempered spring steel, guaranteed to retain its shape. The handlebars have been slightly changed for the coming season, being a little wider, with grips flaring outward. The bar is keyed to the handlebar clamp with a thick washer around the reinforcement, thus making it impossible for the handlebars to force down under long pressure. The grip controls have also been improved and the leverage has been increased in the exhaust lift grip, thus facilitating operation.

All rod ends have been made heavier, thus giving more wearing surface at these joints. Lock washers are used with the nuts on all grip control parts. The original roller bearing construction used on the twin crank-pin bearing, and the "Four-fifty" motor for the 1912 models have proved its effectiveness, but refinements are noted for the coming year. Bosch armored magnetos and improved New Departure brakes are standard equipment.

Other Improvements

Among other refinements is a new gasoline and oil pipe connection which is attached to the pipe without solder; it remains perfectly tight and permits of using the full capacity of the pipe.

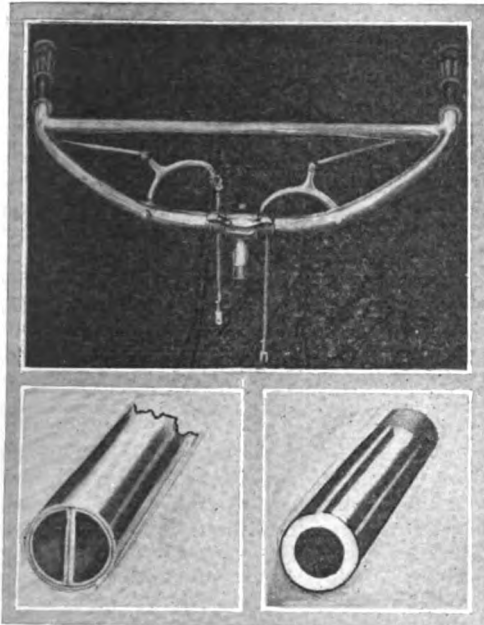
For 1913 the M. M. machines will be finished in an attractive shade of French gray. The cylinders, magneto and saddle springs are black and there is a black decorative panel on either side of the tank.



New Piston Rings and Wrist-pin Used in the Improved 1913 M. M. Motor.

On account of the greater length of the handlebars and the greater weight of the twin model, a cross-bar reinforcement has been inserted. This provides additional strength and also adds to the convenience of attaching a gas tank, lamp, horn, speedometer or other fitment.

A new fitting is used in the center of the intake manifold which gives a wide elbow and easy turns, thus providing for easier access of the gas from the carburetor to the cylinders. The twin is also fitted with a larger manifold and a 1-inch carburetor instead of a ¾-inch type as used heretofore. This cuts



Reinforced Handlebars, and Reinforced Frame and Fork-stem Tubing.

down the amount of gas required to fill the cylinders at high speed by nearly 50 per cent. and adds to the speed of this model.

A Muffler of New Design

The muffler and exhaust pipes have also received attention. The latter are given a more gradual curve and are kept out from the motor base to permit of better circulation of air than was possible in the past. The new muffler, while smaller in diameter and proportionately neater in appearance, is credited with being as effective as the old silencer.

A brand of steel known in mechanical circles as "high-ten" is now used in the eccentric magneto gears. It is unusually tough and still can be tempered to resist wearing of the teeth, which undergo a severe strain due to the eccentric principle. One of the improvements noted on the "Four-fifty" model is a large tool-box, capable of carrying an inner tube and batteries for lighting, if desired.

The 1912 features which are found in the new models without change are the 90-degree principle used in the twin motor, the separate cam-shaft compartment in the base, the double truss forks, the multiple disc free engine clutch, the turn-buckle chain adjustment, the spring-tension hand idler and the long, non-grain bronze bearings.

General Specifications

Transmission is by V-belt or endless flat leather belt (Spartan) 1¾ inches wide, on the twin, and by 1¾ inches endless flat belt of Spartan make on the single. Force feed lubrication is used; the Eclipse clutch is standard

equipment, as is the Schebler carburetor, and a choice is allowed of Mesinger Standard or Cavalry saddles. Tires are 2½ inches wide, with options on the leading makes. Gasoline tank holds seven quarts, oil tank three pints. Twenty-eight-inch wheels are fitted. Height to seat-post, 29 inches.

AN ADJUNCT TO THE CHURCH.

OUT in Kansas where the towns are small and the distance between towns just the opposite, there are several up-to-date ministers of the Gospel who are enthusiastic motorcyclists. They find that it enables them to do their work much more effectively out in the country; and it gives them, besides, a chance to secure some of the recreation that they need.

Rev. J. F. Steves, of Admire, Kansas, is one of the men, and he has been a Yale rider since 1909. Besides his charge at Admire, Mr. Steves preaches at another country church. Before he enlisted the Yale in the good work it meant a long, tiresome journey of several hours whenever he preached at both places on the same Sunday. Now it's merely a ride of an hour.

A CORRECTED LIST.

AN error found its way into a recent announcement of the officers of the Pittsburgh M. C. and Secretary W. J. Black has forwarded the following corrected list: S. J. Martin, president; G. G. Powell, vice-president; W. J. Black, secretary; H. A. Neville, treasurer; G. M. Beckett, E. B. Connell and A. G. Schmidt, House and Rules Committee; S. C. Hamilton, R. E. Dennis and John Presy, Entertainment Committee; B. S. Hargrave, E. B. Connell and B. Powell, Membership Committee.

A SIDECAR CLUB.

WHAT is probably the first sidecar club on this continent was recently formed in Toronto, Canada. The city boasts of 150 machines with sidecars and practically all of the sidecar enthusiasts have joined the club.

THE motorcycle is finding its way into the repair department of practically every telephone company in the Union.

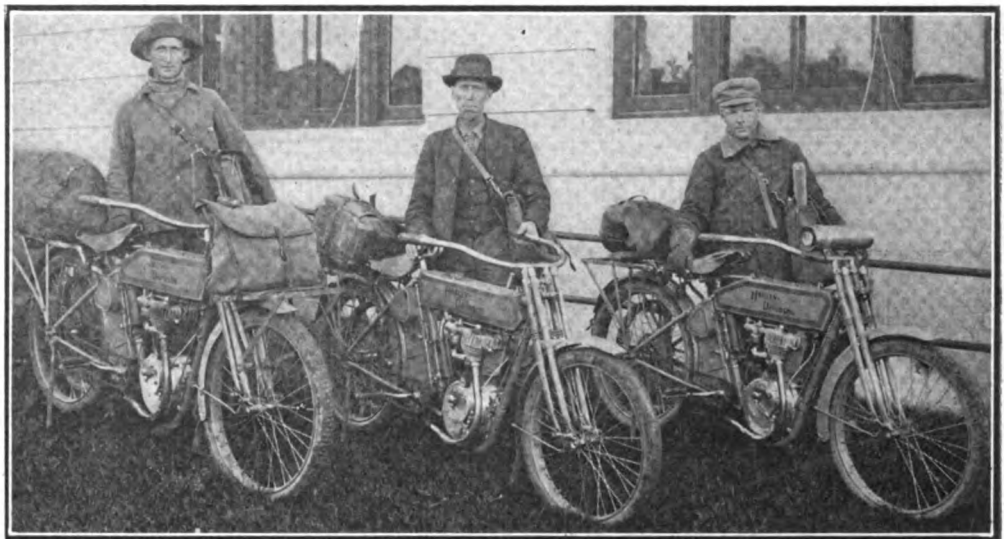
F. A. M. GROWTH BY STATES.

F. A. M. membership statistics for November are given by Secretary Gibson as follows: New Hampshire—renewal, 1; Massachusetts—affiliated, 2; unaffiliated, 1; renewals, 8; Rhode Island—renewals, 2; Connecticut—affiliated, 1; renewal, 1; New York—affiliated, 26; unaffiliated, 2; renewals, 31; New Jersey—affiliated, 16; renewals, 4; Pennsylvania—affiliated, 6; unaffiliated, 1; renewals, 13; Maryland—renewals, 10; Virginia—renewal, 1; Tennessee—renewals, 2; Georgia—unaffiliated, 1; renewals, 4; Florida—affiliated, 3; Alabama—renewals, 4; Louisiana—affiliated, 19; renewal, 1; Texas—affiliated, 7; unaffiliated, 1; renewals, 4; Kentucky—affiliated, 2; unaffiliated, 2; renewal, 1; Ohio—affiliated, 25; unaffiliated, 15; renewals, 7; Indiana—affiliated, 23; unaffiliated, 1; renewals, 4; Illinois—affiliated, 31; unaffiliated, 3; renewals, 10; Missouri—affiliated, 26; unaffiliated, 1; renewals, 13; Wisconsin—affiliated, 15; unaffiliated, 1; renewals, 6; Michigan—affiliated, 1; unaffiliated, 1; Minnesota—unaffiliated, 1; renewals, 6; North Dakota—unaffiliated, 1; renewal, 1; South Dakota—affiliated, 1; renewal, 1; Kansas—affiliated, 34; renewals, 2; Iowa—unaffiliated, 1; California—affiliated, 27; unaffiliated, 14; renewals, 25; Nevada—unaffiliated, 1; Colorado—unaffiliated, 1; renewals, 3; New Mexico—renewal, 1; Arizona—unaffiliated, 1; Montana—affiliated, 4; unaffiliated, 1; Washington—affiliated, 4; unaffiliated, 1; Philippine Islands—affiliated, 4; Cuba—unaffiliated, 1. making a total of 277 affiliated, 53 unaffiliated and 166 renewals.

MAY TRY FOR ASSEMBLY.

OFFICIALS of the Chicago Motorcycle Club are considering the advisability of launching a campaign to bring the next national assembly of the F. A. M. to the Windy City. They suggest that the national races could be held on the Elgin automobile course and that the Riverview Motordrome could also be used for professional events.

MEMBERS of the Maryland M. C., of Baltimore, participated in a run to Annapolis on Sunday, December 15.



FERGUS FALLS CARRIERS.

IN the accompanying photograph appear three R. F. D. mail carriers of Fergus Falls, Minn. From left to right they are Messrs. Tomhave, Davis and Haarstick. These men crowd their machines to the limit in covering their routes through all

kinds of weather, but they have obtained uniformly good results. On the day the picture was forwarded the thermometer showed 10 degrees below zero in Fergus Falls, but the motorcycle carriers took to the road confidently. The photograph is forwarded by O. Bertelsen & Co.

The F.A.M. Abroad

GOVERNING motorcycle bodies of nine countries, including the United States, were represented at the international conference held at Olympia, London, November 28, which resulted in the organization of the *Fédération Internationale des Clubs Motorcyclistes*. The F. A. M. had delegated William H. Wells, of London, to act as its representative, and Mr. Wells was honored in the same manner by the Canadian Motorcyclists' Association. An official report submitted by Mr. Wells indicates that the formation of the international body was attended by much enthusiasm, and that it enters upon its career under most favorable circumstances.

It was agreed that the next meeting of the body, to act upon rules and dispose of any other matters requiring attention, would be held in Paris, December 14, and as soon as this information was communicated to the F. A. M. Mr. Wells was requested by cable to act again as the representative of the American Federation. It is quite likely that Mr. Wells will be named by the F. A. M. as its vice-president in the international body, the rules stipulating that each governing body represented shall appoint a vice-president. It is known that the English enthusiast is willing to accept the office.

The List of Governing Bodies.

The countries to participate in the organization meeting were: Belgium, Canada, Denmark, England, France, Holland, Italy, Switzerland and the United States. Belgium was represented by Emile Beukelar, president of the committee L. V. D.; M. Fagard, president Motor Club Liegeois; M. Michant, secretary R. A. C. B.; Baron Northcomb, president Commission Sportive R. A. C. B.

Canada was represented by William H. Wells, and Denmark had two officials on hand—M. H. Christiansen, vice-president of the Danish M. C., and, M. Mathiasen president of the Motorcycle Club of El-lenham. The English representatives were as follows: E. M. P. Boileau, chairman of Relations Committee of the Auto-Cycle Union; T. W. Loughborough, secretary of Auto-Cycle Union; Meyrick Jones, of the General Committee of the Auto-Cycle Union, and G. F. Sharp, vice-president of the Auto-Cycle Union.

France had two delegates—M. Longue-mare, of the Commission Sportif, A. C., de

France, and T. G. Fenton, of the same body. R. R. Lear, president of the N. M. V., acted for Holland, and Italy was represented by M. le Doctor Oreste Togni, president du Moto Club d'Italia. M. Neher, president of the S. M. T. C., was the Swiss delegate, and William H. Wells acted for the F. A. M. as the governing body for the United States.

Officers of the international federation were elected as follows: The Hon. Arthur Stanley, M.P., was unanimously chosen as president for the opening term; George F. Sharp, of the Temple Press (*Motorcycling*), was elected treasurer, and T. W. Loughborough, secretary of the Auto-Cycle Union, was chosen as secretary.

Objects of the Federation.

The prime objects of the *Fédération Internationale des Clubs Motorcyclistes* is to bring about co-operation among national motorcycling bodies, to foster the sport of motorcycling, to encourage international touring, to provide a central bureau of information on all matters relating to motorcycles and to organize congresses and international competitions for motorcycles. The draft rules printed below were submitted to the assembly and briefly discussed; it was expected that they would be adopted with few revisions at the Paris meeting on December 14. Following the business session of the delegates they were entertained at a luncheon by the Royal Automobile Club.

Original Draft of Rules.

The following rules are interesting as giving an insight into the aims and general policy of the federation, as well as into its executive regulations:

Title.—The title of this body, founded in

Paris on December 22, 1904, and re-established in London on November 28, 1912, shall be the "*Fédération Internationale des Clubs Motorcyclistes*."

The Federation shall be a *Société Anonyme*, and the liability of each Club shall be limited to its subscription.

Representation.—Each country is eligible for representation on the Federation by not more than one Association or Club, which shall be the body controlling the sport in that country. In the event of there being no recognized controlling body for sport accepted by the Automobile Club of the country in question, the existing associations may nominate a delegate, whose appointment shall be subject to the approval of the Automobile Club of the country, and he must submit to the Federation the papers necessary to establish this approval.

Objects.—Its objects shall be: To secure and maintain mutual co-operation amongst the national bodies controlling, in their respective countries, the sport of motorcycling. To encourage and foster the pastime of motorcycling. To facilitate international touring, and maintain cordial relations between the national associations. To provide a center of information on all matters relating to motorcycles. To organize Congresses, and International Competitions for motorcycles.

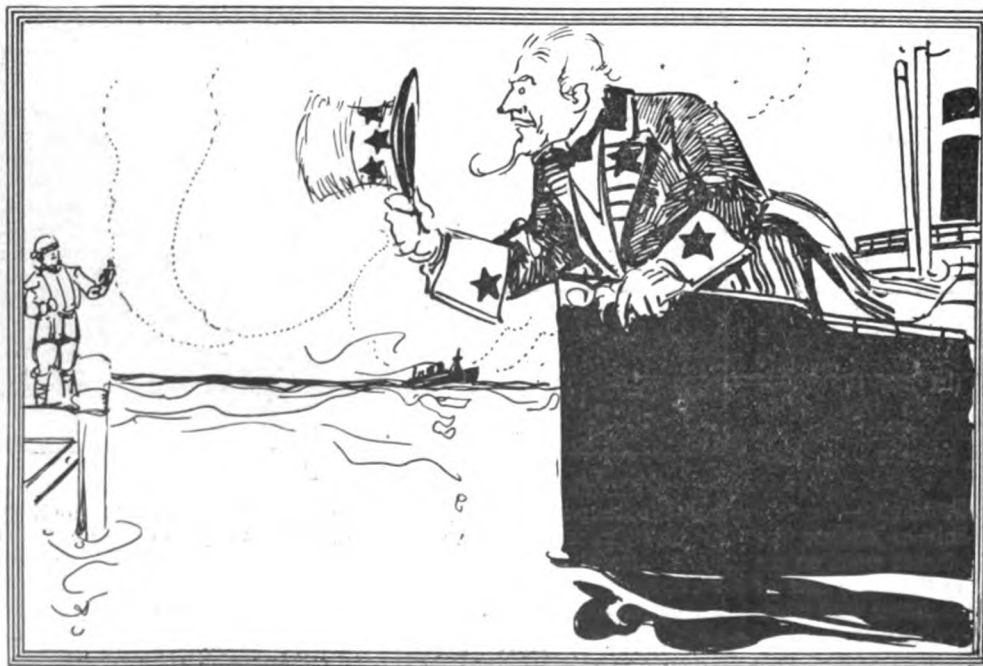
Headquarters.—The headquarters of the Federation shall be as may be determined annually.

Limitation.—For the purposes of these Rules, a motorcycle body shall be: One whose members comprise the users of motorcycles; motorcycles with sidecars and cyclecars.

Freedom of Individual Action.—The Federation shall not interfere with the independence of any constituent association in the conduct of its national affairs.

International Agreement.—All questions relating to reciprocal membership or the interchange of services are left to private treaties of alliance, which each of the constituent associations retains power to contract independently of the Federation, with any other constituent or non-constituent association.

Membership.—Associations desiring to be received into the association shall make application to the Central Bureau before the 1st of



October for membership during the succeeding year. An inquiry shall be made by the Central Bureau, and the information obtained, whether favorable or unfavorable, communicated as received, to those associations already members, one month before the opening of the Congress. Only those associations which are represented at the Congress shall be entitled to vote with regard to the admission of new associations, such admission to take place by a majority of three-fourths of the vote.

Congress.—A. The Federation shall hold a Congress at least twice a year, the first to be in December, and the second about June in the city decided upon by the Congress at its previous meeting.

B. Notices of the Congress, together with the Agenda paper of all matters to be discussed or voted upon, shall be sent by the Secretary of the Federation to the Delegate and Secretary of each representative body at least one month before the day of the meeting, after approval by the Secretary of the date and hour chosen.

Composition of the Congress.—Each constituent association shall be represented at the Congress by one or more delegates, of whom one alone shall have the right of vote. The name of this voting delegate shall be announced at the commencement of the Congress.

In his unavoidable absence he may, with the consent of the Congress, appoint a substitute to vote from the other delegates of the Club. No country can obtain a vote unless its delegate or his nominee is present in person when the vote is taken.

Credentials of Delegates.—Each delegate shall, prior to the Meeting of the Congress, hand to the president or his deputy, a letter from the Association or Club whom he represents, stating that he is empowered by such Association or Club to vote on their behalf, and that they are willing to abide by and be responsible for his actions.

No decision of the Congress shall be valid unless at least half of the constituent associations be represented. For all decisions of the Congress, save only those exceptions which are specified in these rules, a bare majority of votes shall be sufficient.

Quorum.—At least one half of the countries represented in the Federation is necessary for the validity of its deliberations or decisions.

Central Bureau.—In the intervals between the sittings of the Congress, the work of the Federation shall be carried on by a Central Bureau. This Bureau shall consist of a President, three Vice-Presidents, a General Secretary and a Treasurer. It shall have full administrative power, and may act as scrutineers in the ballot in the event of any votes being taken by post.

Election of Officers.—The election of officers, who shall constitute the Central Bureau, shall be by means of a ballot, and shall take place at the December Congress in each year.

Postal Votes.—A vote by correspondence may be taken in the following manner. The motion must be sent in to the President of the Central Bureau. Within the term of a month after its receipt, it must be sent out accompanied by a voting form to all the constituent associations which shall return their votes within two months of the date of issue. The term on which this date expires must be explicitly stated on the voting form. Any Association or Club not having registered its

vote within the time indicated shall be considered as voting in the affirmative.

All correspondence shall be by registered letter post.

Subscriptions.—Each association belonging to the Federation shall pay an annual subscription of 250 francs for the twelve months ending 31st December. All subscriptions shall be paid before the end of January.

In the event of a Club's subscription not being paid by the end of January, that Club shall not participate in any of the advantages and privileges of the Federa-

tion, but its liabilities shall continue, and the Congress may refuse to accept its resignation until all arrears of indebtedness have been paid.

Resignations.—Any association or club wishing to withdraw from the Federation shall give notice of such intention to the Central Bureau by registered letter before the 1st October in any year.

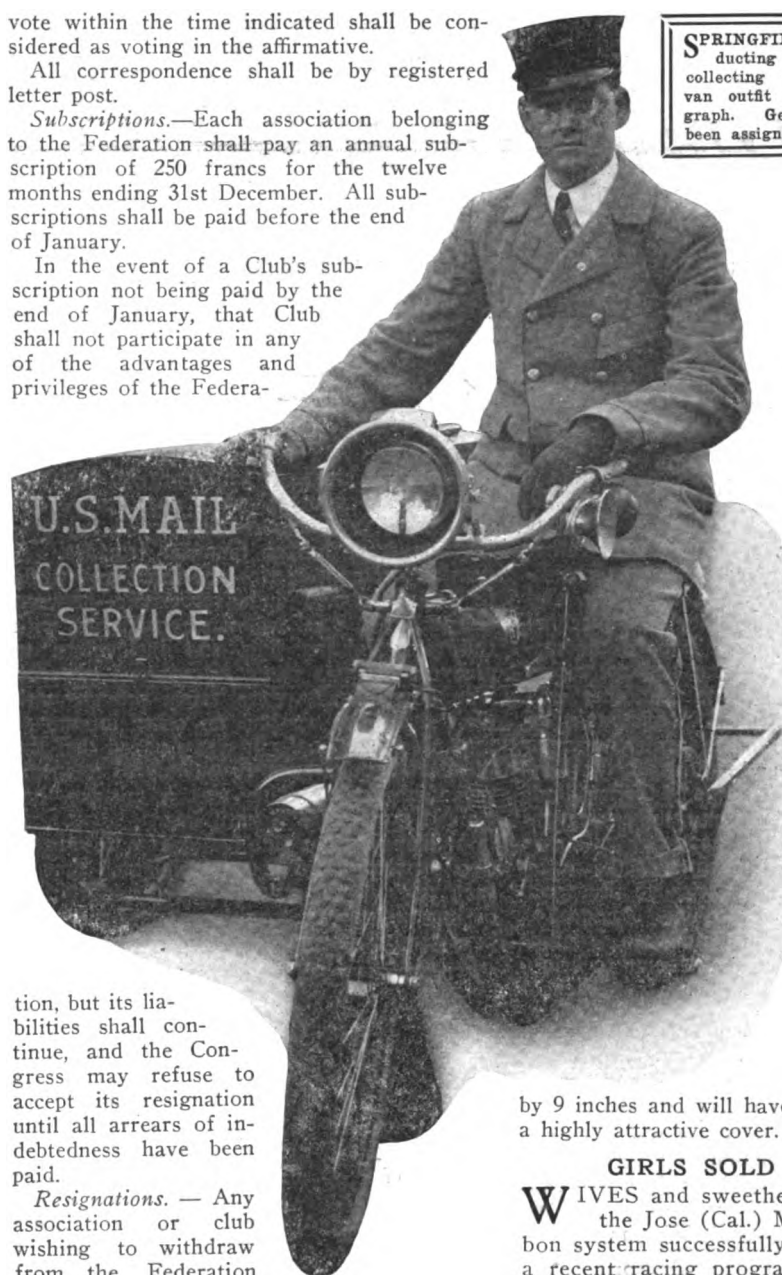
Expulsion.—The expulsion of any Association cannot take place except at a Congress, and there must be a majority of at least three-fourths of the votes.

Finance.—A. All subscriptions and other monies shall be remitted to the Secretary, who will give an official receipt therefor. Any expense other than those arranged for by the Congress can only be incurred on the approval of the Clubs forming the Federation.

B. The Secretary shall periodically hand to the Treasurer all monies received by him, who shall pay same into the bank in the joint names of the President and Treasurer, and that all cheques drawn to meet current expenses shall be signed by the President and Treasurer.

Dissolution.—The Federation can only be dissolved by a majority of two-thirds of the votes of those delegates present at the Congress called for that purpose, and in the event of its being decided to dissolve the Federation, the funds in hand will be divided amongst those associations belonging to and retaining their membership in the Federation.

SPRINGFIELD, Mass., is conducting experiments in mail collecting with the motorcycle van outfit shown in the photograph. George E. Rooney has been assigned as pilot.



M. M. A. PROGRAM

PLANS have been laid by the Motorcycle Manufacturers' Association to print and distribute free of charge, 10,000 copies of a handsome program and trade directory in connection with the independent Motorcycle Show in Chicago. Besides the musical program and trade directory the booklet will contain short sketches of the men back of the various exhibits, and will be of prime interest in other ways. The Show Committee is now accepting advertising copy for this program and those who desire to be represented in it are requested to apply for rates and other details. The program will be 6

by 9 inches and will have about 48 pages and a highly attractive cover.

GIRLS SOLD RIBBONS.

WIVES and sweethearts of members of the Jose (Cal.) M. C. operated a ribbon system successfully in connection with a recent racing program arranged by the club. The girls hustled about and pinned a ribbon on the coat of a motorist wherever they found one, and then collected a nominal fee. The ribbon entitled the wearer to admission to the track and to participation in a big barbecue which followed the racing. The ribbon idea had not been applied to the motorcycle game before in California, and it is stated that a number of other clubs throughout the State may now resort to it in connection with future meets. It enables the girl enthusiasts to give the clubs practical assistance and also results in rounding up every speed fan in the district.

LECTURE BY TOURISTS.

L. H. LANE and G. H. Hammond, who recently completed a 13,000-mile trip through the British Isles, were guests of the Flower City M. C., of Rochester, N. Y., at its last meeting. The guests consented to turn entertainers for the evening and gave the members an interesting description of their tour.

CHARLES DE SALVO, widely known as a motorcycle speedster, has accepted a position as chief tester with the Black Hawk Motor Company.

THE CLUB IN OUR TOWN

Further sidelights on the upbuilding of an organization that encountered more than its share of obstacles

By FREEMAN JARGO

How a Small Squad Struggled Through Early Vicissitudes, Fought Off Trade and Other Jealousies, Grew in Membership, and Finally Came Into Possession of a True Spirit of Fellowship.—Part II.

I RECALL one incident that opened quite a breach in our club. While eight of the boys were on the road on a certain Saturday afternoon three of them figured in a rather serious mix-up. They went over an embankment into a gully about ten feet deep, and while the riders escaped injury each machine was pretty badly battered. Two of the machines were of the make that had six representatives in the club, while the other was of a rival make, represented in our ranks by only three riders. One of the former members located a telephone and informed the city agent for his make of machine of the accident.

There was some confusion, and a messenger from the city finally appeared with repair parts for the two machines of the make handled by this dealer, but without any parts for the other damaged machine. Naturally, this rider figured that he had been ignored for trade reasons, and when it came to being "sore" he had the traditional boil backed completely off the anatomical map. As a matter of fact, the dealer had not interpreted the telephone message correctly, and that accounted for his failure to have his messenger obtain repair parts for the third machine before starting for the scene of the accident. He offered this explanation, but it was accepted "on the half shell," as it were, and that little incident threatened for a time to revive all kinds of factional differences.

The Value of a Road Doctor.

The incident above referred to taught us a lesson, and we lost no time in appointing a mechanic, or "road doctor," as we called him. He was a club member who was unusually handy about a motorcycle engine, and for acting in the capacity of mechanic he was presented with a paid-up membership card for a year. It was the duty of this rider to assist the boys when they had trouble on the road, and if necessary to ride to the nearest town to obtain repair parts. Obviously, no trade lines could be drawn under these conditions, and the mechanic simply put forth his best efforts for the other members, regardless of dealers or machine makes.

It is not always easy to find a competent and reliable rider in a club, who is willing to act as "road doctor," but when it is possible the appointment should be made at once. Our club found that its rider-mechanic was worth ten times the amount of his dues for the year, and he seemed to enjoy the work, which was seldom onerous.

Assessments Breed Trouble.

Owing to the fact that the father of one of our members owned the building in which we finally obtained quarters we were able

to drive an excellent rent bargain, and our expenses in general were not heavy, but even these favorable conditions did not prevent us from having financial troubles. A furniture committee was appointed, and while its outlay seemed quite reasonable—between \$90 and \$100, I believe—it was sufficient, with the rent, lighting bills and incidentals, to give our officials many an anxious moment. The boys usually were fairly prompt with their dues, but we had no other income at that time, and finally it was decided that the members would have to submit to a furniture assessment. This was a mistake, but we did not realize it until later.

At that time our club had grown to twenty-two members, and it was explained that if each rider would make a special contribution of one dollar our committee could meet the next two payments on the furniture and in

it was time to give up the quarters, and perhaps the organization itself. Those were gloomy days.

How a Picnic Saved the Day.

Finally the assessment was reduced from one dollar to half a dollar, and the boys paid it, but not until they had expressed themselves pretty forcibly. It was quite plain that an effort to collect another assessment—however necessary it might be—would result in the disruption of the club. Accordingly, our officers set about solving the financial problem in another way, and as luck would have it they hit upon just the right scheme. Plans were laid for a picnic at a park three miles outside the city, and by handling the three dealer members diplomatically (this was left to the cool-headed officer before mentioned) we soon had them working like Trojans for the affair.

Invitations were sent all the motorcyclists we could locate in our county and to two clubs about twenty miles distant. The idea was a new one, as applied to the motorcycle field in that territory, and we had no less than forty visitors. Each paid a dollar—as did our own members—and this entitled them to all they could eat and drink, and to participation in several games for which prizes of motorcycle accessories had been donated by the three dealers. Incidentally, each dealer furnished one course of the dinner, and in a cheap but tasteful little program his name was used in connection with that course: Watermelon—a la Bill Jones, for example. This gave the dealers a sort of "comeback" for their outlay, and made them feel that we appreciated their generosity. It also introduced them to the visiting riders, and that was a point not to be overlooked. Well, the picnic was a financial success, and with all bills paid we netted about \$30. Don't smile; that thirty-dollar profit looked like a fortune to us at that time, and it probably saved the club. Here's the moral for young clubs: Never force an assessment upon the members if there is any way open to your ingenuity of raising money otherwise—and there usually is.

Dealing With the Road-Burner.

I sometimes think one of the best possible developments for clubs throughout the country would be a decision on the part of manufacturers to make no motorcycles capable of a speed greater than 25 miles an hour; under such conditions the road-burner would be eliminated and a great stride would be taken toward that sociability which is a fundamental of the thoroughly successful club. Such an arrangement is out of the question, of



"The bills continued to pile up until they gave our officials many an anxious moment."

the meantime the dues would have accumulated so that the following instalment, and possibly the one after that, could be handled without difficulty. The proposition shaped up well on paper, but when it came to collecting we struck a snag, half a dozen of them, in fact. One or two of the boys went so far as to state that if the club couldn't meet its expenses without "sandbagging" its members,

course; it is suggested simply as a basis of argument, but the fact remains that if some scheme could be devised to keep the riders together throughout an ordinary run it would dispose of another source of trouble in clubs.

Officers may lay down rules for the road, but the chap with a twin seven is going to chafe a bit and finally give up going on the club outings if he is compelled to purr along peacefully with his brother member who mounts a four. He knows he has the power under him; he has paid for it, and he wants to use it. On the other hand, the rider with a single, perhaps of last season's vintage, objects to being "shown-up" for a mollycoddle along the road. Soon the club is divided on the road into the speedsters and the conservatives, each regarding the other with more or less contempt.

This is a condition to be deeply regretted, for it is on the road that any motorcycle

honest pride in its achievements, and when he does this the organization is on the high-road to success. Not long ago one of our most dependable riders figured in a rather embarrassing mix-up, which will serve admirably to illustrate my point. He attempted to pass a hay wagon on a narrow road, with the result that he found himself in a ditch with a goodly portion of the load of hay on top of him, for the horses had shied and partly upset the wagon.

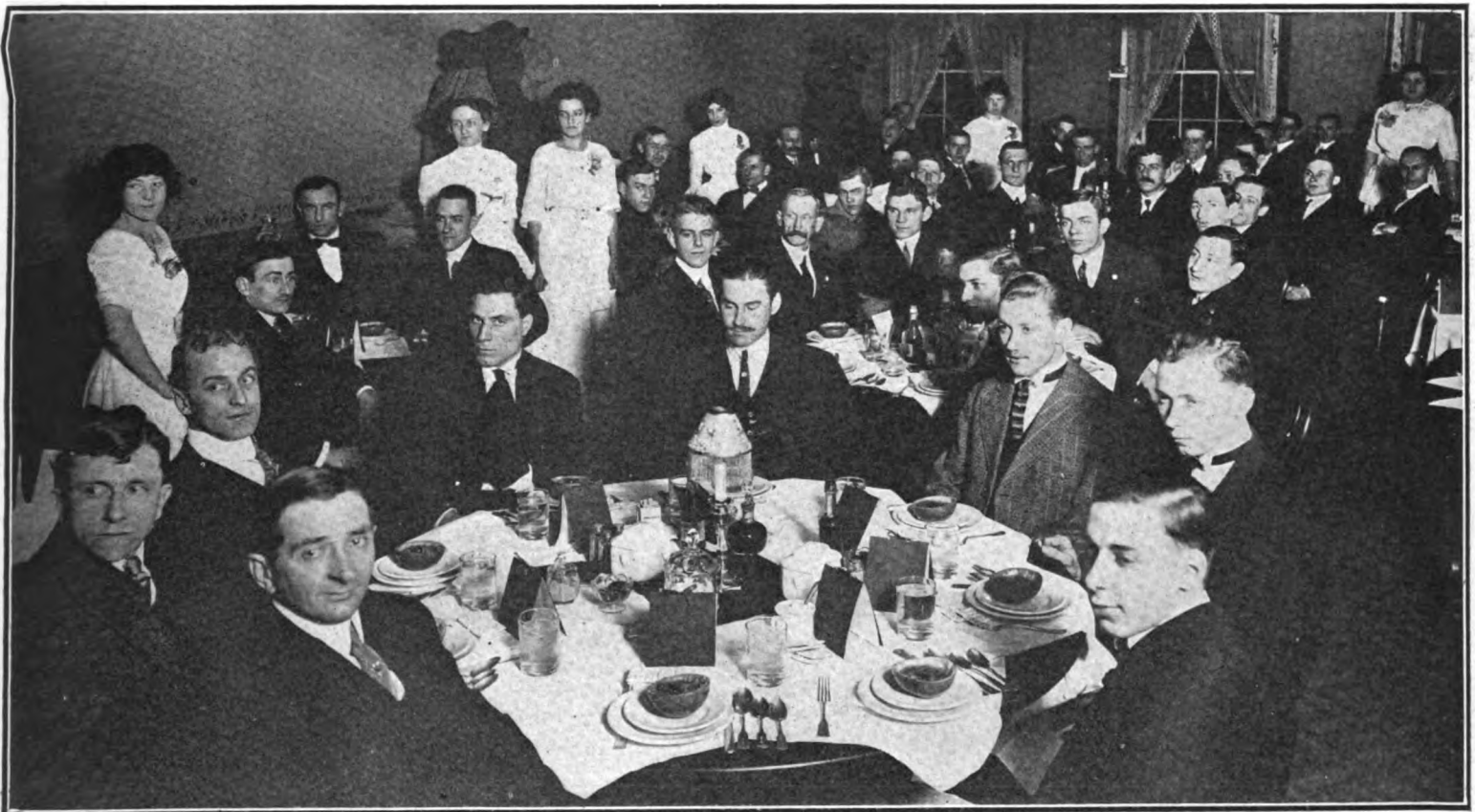
While our member was straightening a few kinks in his machine and also trying to straighten matters with the owner of the hay, two unknown motorcyclists appeared. Naturally, they stopped and made inquiries.

"I see you're a member of the——M. C.," remarked one of the strangers, pointing to the pennant which still dangled from the handlebars of the damaged machine.

"Nothing doing, objected our rider, this is my brother's machine; I merely borrowed

sacrificed himself to protect his club and maintain the standing of its emblem. There was true club spirit for you! He didn't need to tell the story, for the two visiting motorcyclists rode on into our town and explained how an unfortunate rider on the road had been fair enough to stand by our club. When the member in question arrived home with his battered machine late in the afternoon, he discovered that he had gone up in the estimation of his clubmates about fifty per cent. He found the boys slapping him on the back with a new spirit, and it was worth all he had suffered in the mix-up. See the point I'm getting at? How can a club go wrong, or fail in any legitimate aim if it has half a hundred members like the one referred to in the above incident? It can't.

True fellowship is not indicated simply by a handclasp now and then, and the willingness to supply a few timely drops of cement or a patch for a brother rider on the road.



club's enthusiasm and its spirit of sociability should be at top pitch. Our club worked around the problem to some extent by offering prizes for the members attending the most social runs, and by subtracting ten marks from the score of each rider who abandoned the squad on the road. If a member felt like speeding on ahead of the club the officials did not attempt to restrain him; they simply "docked" him ten points, and the other boys regarded him somewhat in the light of a deserter. This system helped, but the road-burners and the speeding problem we had always with us—and we still have them.

Respecting the Club Emblem.

We have learned through experience that organizers of motorcycle clubs cannot be too careful in fostering respect of the club's standing in the community and of its emblem. The rider who respects his club will take

MOTORCYCLISTS of Trenton, N. J. dining as guests of John Sykes, Indian agent in the capital city, at his second annual banquet held recently. Over fifty riders from Trenton and nearby cities were present.

it for a short run. And, say, if he knew I had disgraced his club by getting into a fool mix-up like this, he'd never let me get within shouting distance of the machine again. The members of the —— M. C. are a careful and experienced lot of boys, and they don't do things like this."

Why a Generous Spirit Pays.

With that our rider rolled up the pennant and stuck it into his pocket, to avoid further embarrassing explanations. He had been obliged to deviate from the truth, but he had

It goes deeper. It implies that you would not injure his feelings, any more than you would deliberately damage his machine or any other piece of his property. It means a willingness to speak a *good word* for him—though a disparaging word may seem handier; it means an attitude of fairness toward your dealer (who usually has troubles of his own), toward all road users, motorcyclists or otherwise, and toward the club upon which your actions reflect—for good or ill. As previously stated, our club has grown to over eighty members—it had sixty at the time of the pennant incident related above—and we feel now that our fellowship percentage is fairly high. Still we did not come by it in a day, and what we have done other clubs can do.

F. J. WILHELM Company, of 114 North Erie street, Toledo, are distributors for the Reading-Standard in northwestern Ohio.



"WITH all our manufacturers figuring on capacity outputs for 1913 and prospects exceedingly bright for the biggest year in the history of the American trade," remarked the veteran dealer who was tinkering with my cranky grip control, "it strikes me that the time is at hand for motorcycle dealers throughout the country to perk up and see that they keep pace with developments. That does not imply simply a new coat of paint on the storefront and a column or two of advertising in the local papers—although both these lines of activity are commendable; it means that the dealer must get down to bed-rock business principles, that he must not only make sales, but get some real money for making them.

"I ought to known a thing or two about the situation," continued the V. D., "for it has kept me pretty busy during the last season making up the money I allowed to get away from me in the two previous years. I don't mean that I ran far behind; if I had I probably would be working for some one now instead of running my own shop, but in one way and another I did lose considerable money and a lot of valuable time.

"Have trouble with collections?" I queried, assuming that outstanding bills must figure heavily in the losses referred to by the veteran.

"Not half as much trouble as might be expected," was the reply.

The dealer straightened from his task and tapped my shoulder portentously with a calloused forefinger.

How Profits Dribbled Away.

"Don't let that bad bill idea run away with you," he went on, "for I have found that very few of the boys will order a job done unless they can see their way clear to pay for it. The same policy is usually applied to the purchase of a machine. I have learned that when a patron comes to my shop prepared to pick out his mount he is quite likely to have two-thirds of the purchase price in his pocket. I am assuming, of course, that he is going to buy a new machine outright. If he is desirous of trading in an old mount he probably counts upon paying very little in actual cash, and I am in line for trouble.

"No," continued the dealer, "outstanding

bills have not bothered me half as much as 'instanding' machines. By the latter I mean old machines on which I have allowed \$75 to \$150 in a deal to dispose of a new model, and which I have often been compelled to sell at such a loss that my profit on the new machine dribbled away, leaving me nothing for my trouble but a broken-down motorcycle which required repairs before I could even offer it for sale.

The Trading-In Bugaboo.

"No matter how you look at it, the exchange system entails the making of two sales," said the V. D., as he returned to my machine, "and the second sale is the one that usually adds to our gray hairs. Even assuming that the original bargain was a good one, and that the used machine was taken in at a fairly low price, it is quite likely that we will be forced to sell it finally for less than we allowed the purchaser of the new mount, thus cutting into our margin on the latter.

"The solution of the exchange problem? Well, strictly speaking, I don't believe there



accompanied by their wives or sweethearts, and the feminine enthusiasts entered into the spirit of the occasion with a vim. The two accompanying photographs tell their own story. In the one at the left the girls are assisting in the demolition of the melons, while the other picture shows the male contingent hard at work, with plenty of melons still ahead of them.

ONE of the most novel and successful outings held at Redlands, Cal., during the last summer took the form of a watermelon feast engineered by C. H. Clem, Harley-Davidson agent in Redlands. Clem drew no lines in sending out his invitations, and riders from near and far gathered at the scene of the melon carnival. About a score of the guests were



is one. As long as dealers take in second-hand machines they are pretty certain to have more or less trouble. I have solved my own problem by refusing to load up with old mounts, unless their owners practically offer them as gifts. But before I arrived at this decision I had to learn my lesson.

"When a rider announces now that he wants to trade in an old machine as part payment on a new model I explain the situation to him, and wind-up by agreeing to store his second-hand mount while I am trying to sell it for him, but I insist upon getting the regular purchase price for the new machine. Then if we are left with the old mount on our hands, the rider suffers the loss, and this is as it should be. He has had a season or two of service out of the machine, and even if the broken-down mount is never sold the owner has not lost much. On the other hand, if I fail to sell a traded in machine it is a clear loss to me.

The Manufacturer's Attitude.

"In spite of all our figuring," lamented the veteran, "there may come a time when the

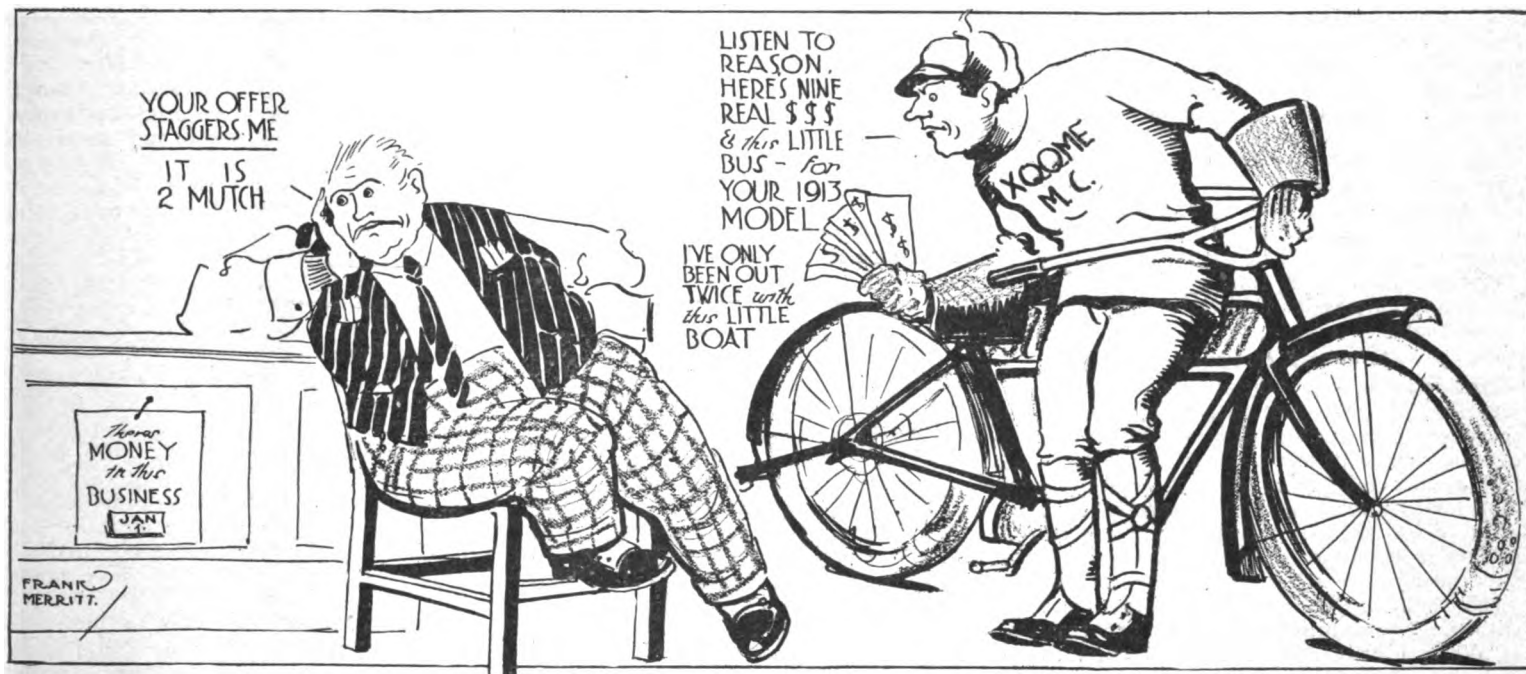
manufacturer of the machine or machines we represent decides to cover our territory from a centrally located branch, and we are left high and dry, after years of struggling to make ends meet. I have not had to contend with such conditions of course, but I know of motorcycle dealers who have. There is a reason for the action of the manufacturer, he cannot be blamed for running his sales organization as economically as possible, but it does seem pretty tough on a dealer.

"The latter, particularly if he is in a small district, is held directly responsible for the performances of the machines he sells; he introduces a certain make and stands behind the guarantee to keep it running. He must doctor the mount from time to time, so that when the rider decides to buy a new machine, he will not purchase one of a rival make, and much thought and some material go into the mount, without a direct return from the dealer. He is laboring to uphold the manufacturer's reputation as well as his own. True enough, the manufacturer has the cash and assumes the main responsibility, but the

dealer puts his mechanical skill and his integrity into the business, and if he fails in this the manufacturer soon finds that the district is producing no sales.

Justice for the Small Dealer.

"However small the dealer's business may be, I do not believe he should be deprived of his agency with a sharp turn if he has been doing his best and playing fair with the manufacturer," asserted the veteran, "but here enters another problem. The dealer may be doing his best and still not producing half as many sales as an agency in a better location might turn in; is the manufacturer to sacrifice these sales and allow the small dealer to retain the agency simply because of the fact that he introduced the machine in that territory? You see, there are two sides, as usual, and I would prefer to have some other dealer act as judge in the premises. Conditions do not appear to be just what they should be, but in which direction shall we travel to improve them? How are we to give full justice to the small dealer and still play fair with the manufacturer?



CARRIED TON OF MAIL.

THREE rural mail carriers of Haven, Kan., who use motorcycles in covering their routes have compiled figures showing that in one month's time they handled a ton of mail matter on their routes. The total number of pieces carried was 20,710. They complete their day's deliveries in about two hours on motorcycles, while it used to take them nearly all day with horses. The present expense for a trip is 10 cents, whereas \$1 was the usual expenditure with the horse system.

CLUB WORKER KILLED

WHILE crossing a railroad track, Clayton T. Robbins, Yale and Indian agent at Elyria, Ohio, was struck by an engine and killed. With his death the Elyria Motorcycle Club loses one of its most active members and boosters. Fifteen members of the Elyria M. C. acted as pallbearers at the funeral.

A REPORT from the marshal's office shows that more than one hundred motorcycles were sold in Springfield, Ohio, during the past year.

REGISTERED SHOPS.

THE motorcycle repair shops of George O. Murphy, 89 Main street, Waverly, R. I.; Thomas J. Newman, 2718 Atlantic City, N. J.; Habich Brothers (Charles Habich), 170 Western avenue, Blue Island, Ill.; Richard E. Morrison, 108 South Broad street, Middletown, O., and A. R. Horn, of 716 Third avenue, South, Minneapolis, Minn., are now on the F. A. M. registered list.

WHERE SALES ARE RAPID.

STATISTICS gathered by the Marshal of Redlands, Cal., show that more motorcycles are purchased in Redlands than in any other town in the country of its size. During the last year seventy-five machines of one make alone were sold in that city.

A NOTABLE RECORD.

ALTHOUGH the motorcycle has been in use by the police department of Fulton County, Ga., only two years, Z. E. Rowman, chief of police, claims that crime and disorder have been reduced 50 per cent.

BANQUET IN SHOW WEEK

AT the last meeting of the Cleveland (Ohio) M. C. plans were laid for an endurance run, not to exceed 100 miles. It will be held on January 1, and entries are being filed rapidly. The club also decided to hold a banquet on Wednesday, January 8, as a feature of the Show Week. A banquet held last year under the same conditions scored a hit. The club is now holding its meetings in the Hotel Gillsey.

C. M. A. BANQUET

AN unusually attractive program marked the first annual banquet of the Canadian Motorcyclists' Association, which was held at the St. Charles Hotel, in Toronto, on Friday, December 20. A fine spread was followed by addresses and entertainment features, and the whole affair reflected credit upon the committee in charge and upon Canada's recently formed governing body for motorcyclists.

SPOKANE EXACTS FEE.

A NEW motor vehicle law, which has just gone into effect in Spokane, Wash., requires motorcycles to carry a license, for which a fee of \$2 will be charged.

MAPPING FOR MOTORCYCLISTS

F. A. M. Touring Bureau's First Official List of Routes About Ready for Distribution; Timely Suggestions by Official of Automobile Touring Bureau Relative to Developing a New Department for F. A. M. Riders.

OFFICIAL announcement is made that the F. A. M. Touring Bureau is now in possession of information covering nearly 400 routes throughout the country, and it is stated that most of this data will have been tabulated and filed before the middle of January. An official list of these tours has been forwarded to National Secretary G. B. Gibson, who will distribute printed copies with other Federation literature after the first of the year. It will then be a simple matter for any F. A. M. member to make application for a listed route. Supplements to this list will be prepared and distributed from time to time as the Touring Bureau completes its information on additional routes.

A Timely Interview.

Not long ago an official who has been identified for years past with an automobile touring service of national scope found time to lean back in his swivel chair, light a cigar and discuss the possibilities of road-mapping for motorcyclists with a representative of the F. A. M. Touring Bureau, and as a result those in charge of the latter department have been still further impressed with the responsibilities that devolve upon them and with the opportunities at hand for progress.

"While I have not been called upon to make the closest study of motorcycle touring conditions," said the automobile official, "I have kept in touch with the performances of tourists on the single-trackers of late and have arrived at the conclusion that many skeptical folk are due to be startled by the extent to which motorcycles will figure in national touring during 1913. Consider the situation for a moment. The standard motorcycle will travel wherever the automobile has gone, and in many places where the latter's four wheels bar it; admitting this, it is obvious that touring must become the most powerful factor in spreading motorcycle popularity.

The Demand for Special Maps.

"Bicycle boosters of a few years ago made great strides in touring work, but in view of the fact that bicycle touring was necessarily quite narrow in scope it never did and, of course, never could assume the relative importance of motorcycle touring. The motorcycle is naturally a long-distance traveler, and special provisions must be made for its devotees. In the first place good maps are necessary, and it is far from an easy task to obtain them. An ordinary road map will serve the purpose, of course,

but if motorcycle tourists are to be given proper encouragement they should have maps prepared with consideration for their particular requirements.

"The large and rather heavy route books arranged for automobilists are unsuitable for motorcyclists, and it strikes me that the present problem of the F. A. M. Touring Bureau is to provide sectional and State maps in the simplest possible form, so that the tourist over any given route will have all the information he needs on a comparatively small and inexpensive pocket folder.

"In the past motorcyclists have often had to rely upon the heavy automobile route books, and I know of one motorcyclist, liv-

A. M. Touring Bureau at work, of course, such action will not long be necessary. The time is past when motorcycle tourists can put up with makeshifts.

Mapping Is a Complex Task.

"I speak from inside knowledge when I say that probably not more than one agency providing route information and maps for automobile tourists has made any money at all—and that has been through bulk advertising—while thousands of dollars have been laid out by automobile organizations in the work. This money has been made up to a great extent in dues received from new members gained through the touring service, but in some cases it has been quite slow in coming back.

"However, map work done in the future will be much less expensive than in the past, principally because the United States Geological Survey sheets, the only basic reference material available for all, are now being issued more rapidly than ever before; each sheet lightens the expense of route and map work in the locality it covers. Furthermore nearly all the states now have State Highway Commissioners, or some department giving special attention to highway development and several of these bodies of commissioners have already issued maps of their own. The building of through highways and extensive signposting have also been of great assistance.

Some Practical Suggestions.

"All this helps the motorcycle tourist, but after all, his first requirement is a series of small-scale but clear maps, by which he can plan his trip over a large territory, see optional routes in their proper geographical relation and choose the one best suited for his tour. Maps of this character are not nearly as expensive as they were three or four years ago. Still if the financial burden was considered too heavy for the F. A. M. Touring Bureau at the present time, an arrangement might be made to use the plates of automobile maps, with a special motorcycle imprint.

"It might also be well to call the attention of motorcycle manufacturers to the fact that they can be of vast assistance to your new Touring Bureau. For example, a motorcycle manufacturing company in any State could send its testers and traveling men out with instructions to collect general road data in connection with their other duties throughout the State; this would en-



"Most automobile route books are too cumbersome for motorcyclists."

ing in Syracuse, N. Y., who bought two copies of a large road book, at \$2.50 each, and had a bookseller cut them up into sections and bind them so that they could be carried conveniently. The outlay on this basis would be \$10 or \$12 for a single State, and the tourist should not be called upon to shoulder such expense. With your F.

tail little additional expense for the company and would greatly advance the interests of the Touring Bureau. It is well known that the automobile manufacturers contribute liberally to the general work of the American Automobile Association, and the touring department gets a generous proportion of it for road maps. The manufacturers benefit directly through extensive touring and they are usually willing to render assistance.

Working on a Business Basis.

"I do not believe, however, that any map system for motorcyclists will be a success if it is made a display advertising proposition, as some of the automobile route publications have become. The time to prevent such a result is in the beginning. In my opinion a charge should be made for every map, though perhaps not large enough to pay the basic expense of its preparation within the first year or two.

"But if part of the first cost of the maps were divided among the makers of motorcycles and accessories no one would feel the burden, the investment of the manufacturers would soon be returned many fold and it is likely that such a map system would be self-sustaining after the third or fourth year."

A CONSERVATIVE CLUB.

EDITOR MOTORCYCLE ILLUSTRATED: In your December 12 issue The Timely Tipster referred to a Brooklyn motorcyclist who had made an unsuccessful search for a club composed of riders who do not go in for speeding. It was stated that the motorcyclist in question contemplated the organization of a "Forty-Five Club," to be made up of riders between forty and forty-five years of age, in order that he could have company on his leisurely rides into the country.

In this connection I would like to ask the gentleman where he has been keeping himself during the last year, and how the Brooklyn Invincibles have escaped his notice. This club has existed in his own city for quite a while, and I am certain it will meet all his requirements as regards conservative riding. If the dissatisfied rider will step around to 78 Herkimer street, Brooklyn, any Tuesday evening about 8.30 and inquire for a member of the Invincibles we shall be glad to make him welcome, and if he is of the sort that the Tipster's reference to him suggests he will be promptly invited to join our organization.

We have several members who can do some speeding when called upon—myself included—but we reserve our speedfests for the race tracks, where they rightly belong.

JOHN U. CONSTANT,
Publicity Committee, B. I. M. C.

BRAKES ON SIDECARS.

EDITOR MOTORCYCLE ILLUSTRATED: As a sidecar user I was interested in the observations of The Timely Tipster in a recent issue, relative to strains imposed upon motorcycle frames to which the passenger attachments are fitted, and I am moved to call the Tipster's attention to a custom, now apparently growing abroad, of fitting special sidecar brakes. Am I not correct in arguing that such a brake would materially increase the stress to which both the motorcycle frame and sidecar chassis are subjected? I agree with a writer in a recent issue of an English publication, who believes that the braking resistance would impose an unfair and unneces-

sary strain upon the forward members of the sidecar frame, and that the application of the brakes would have to be worked out scientifically to prevent not only undue strain, but the likelihood of a serious smash. As far as I know we are fitting no special sidecar brakes in this country, and I trust that our manufacturers will not take to the idea. In the first place, I believe the extra brake is a trouble-maker, add in the second place, I do not think we need it.

SIDECAR.

A MISSOURI LETTER.

EDITOR MOTORCYCLE ILLUSTRATED: I notice that comparatively few references are made to Missouri motorcyclists in your columns, and I infer that the boys out here do not go to the trouble of keeping in touch with you. This is somewhat excusable because riders are not very plentiful in our State as yet and there is not as much general interest as is found in most other sections. Still, it is my opinion that the Missouri boys who do ride motorcycles thoroughly enjoy them. I am now using my second machine, an Indian twin, which I ride to and from the school where I am an instructor. I have missed only two days since September 1, despite the fact that the mud here is of the variety that rolls up, sticks and causes much trouble after only a slight rain.

Just before the opening of the Fall term of school I made a trip on my machine to Des Moines, Ia., following the Wabash railroad most of the way. The roads east and west through Missouri are much better than those extending north and south, especially in the eastern part of the State. The roads in the northeastern districts are particularly bad in all directions. I returned from Des Moines via Oskaloosa, Ottumwa and Keokuk, in order to see the new dam across the Mississippi river, and it was well worth the extra traveling.

The gasoline consumption for a little over 737 miles was about 11 gallons. On November 16 I rode from Macon to Fayette, Mo., and return, a distance of about 125 miles, and my actual time on the road was seven hours, giving an average of 18 m. p. h. Most of the riders I have met here are inexperienced and their principal trouble is overheating of the motor, due to carbonization. If you decide to print my letter you might state that I would like to hear from motorcyclists along the Northern Pacific railroad in North Dakota.

JESSE FRANCE.

Macon, Mo.

BUFFALO NOMINATIONS.

AT the last regular meeting of the Buffalo (N. Y.) Motorcycle Club nominations of officers for the coming year were made as follows: President, O. H. Peters and A. D. Cook; vice-president, Ira C. Palmer and Bert Barrows; secretary-treasurer, George H. Hair; financial secretary, M. D. McDonald; directors, W. G. Schaack, C. W. Andrews, H. B. Clark, George M. Trefts, A. H. Peters and George Goetzmann; captain, A. J. Meyer, and lieutenant captain, A. Weiland, Charles Liske, William J. Mensch and H. H. Paeters. The election will take place on the evening of January 8.

MOTORCYCLE INSURANCE.

THE revised prospectus of the Auto-Cycle Union, of England, shows that insurance premiums are now based on the horsepower of machines only. There are two types of policies, the first gives complete indemnity while the other embodies certain restrictions.

C. W. WAUGHOP, 4914 Delmar boulevard, St. Louis, Mo., claims to be "the guy who put the son on Henderson." As might be inferred, Waughop has the Henderson agency in this city and is doing well with it.

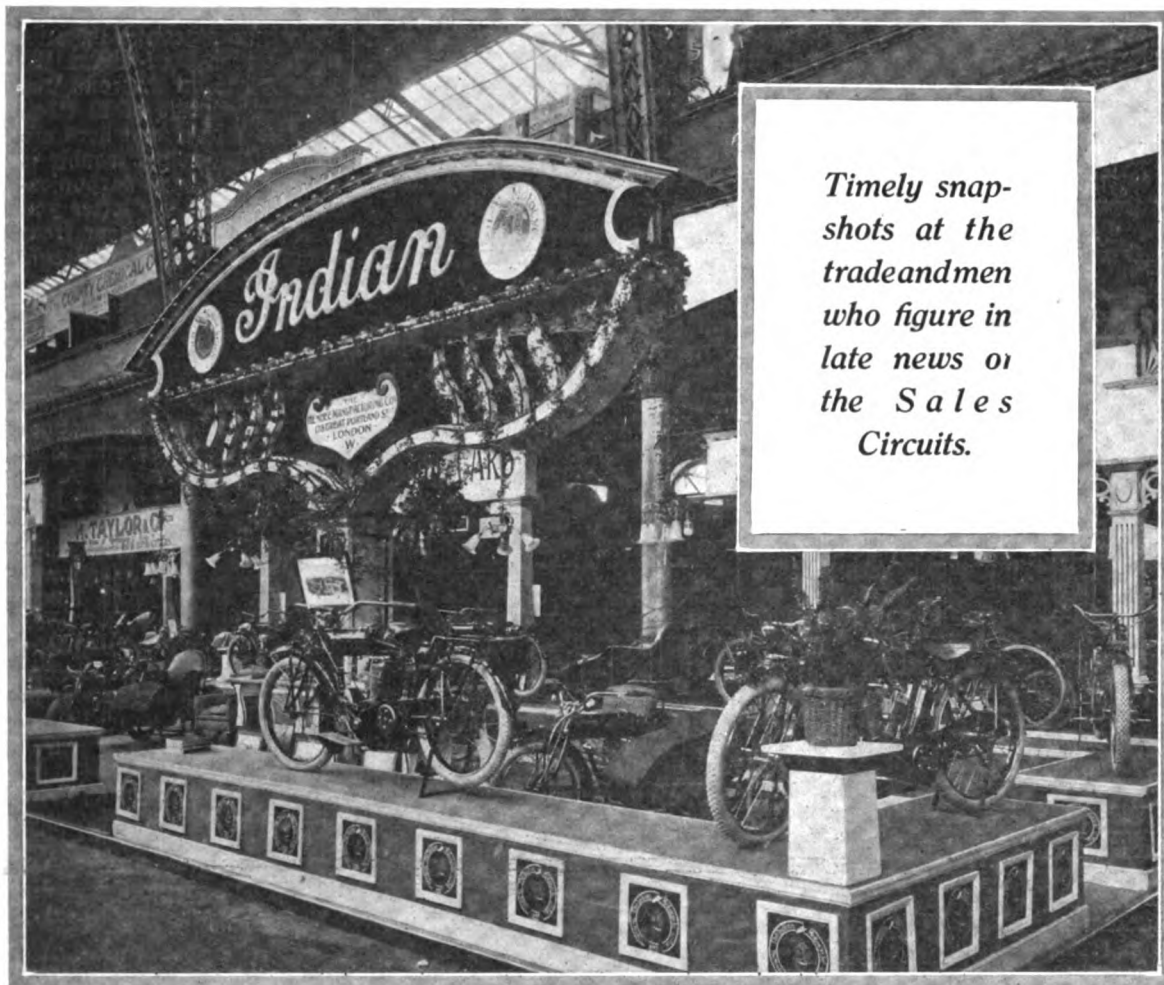


BANQUET AND ELECTION.

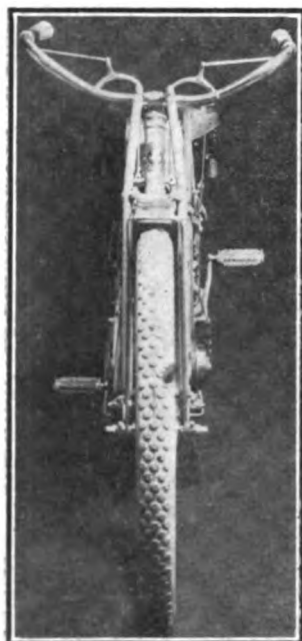
PRECEDING the third annual banquet of the Cortland Motorcycle Club, which was held at the Messenger House in Cortland, N. Y., on Thursday evening, December 12, the members of the club met at the clubrooms and elected officers for the coming year. The new staff is as follows: Paul Parsons, president; E. C. Mead, vice-president; R. H. Ames, secretary-treasurer and W. J. Daymor, captain with F. C. Blankshine and George Green as his

lieutenants. The boys then proceeded to the banquet hall where they found a roast turkey dinner. After the dinner President H. J. Bromhill, acting as toastmaster, called for speeches. Later President Bromhill presented the president-elect with a gavel, decorated with the club colors.

Among the visitors present were: President H. G. Buckley, of the Utica M. C.; Mr. Race and Captain Miller, of the Ithaca club; George W. Fenner, of the Syracuse club, and Chief of Police, Fred Bowker.



Seymour, Crocker and Johnson, three Indian workers who have been "doing things" of late.

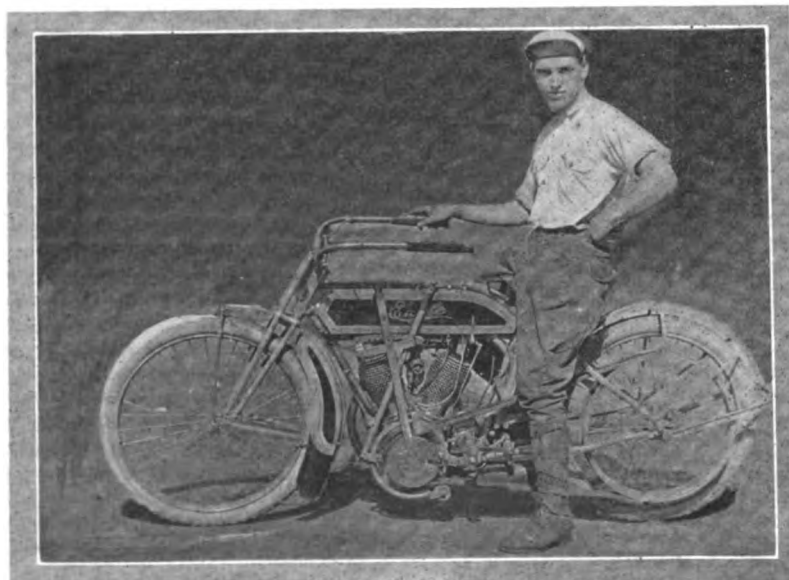


new manager of the Hendee branch in Denver, and Manager Johnson, of the new Atlanta branch appears at the bottom.

The panel at the left gives a head-on view of the new M. M. product, showing the neat lines and compact con-

IN the large photograph above is shown a striking view of the Indian stand in the recent English Show at Olympia. It will be noted that the display and the general arrangement of the stand are well up to the standard maintained by the Hendee company in its exhibits at the American Shows, and, what is more to the point, it is reported that the ice was broken for an unprecedented amount of business during the Show period. All the regular Indian models were shown, as well as an Indian with an attractive sidecar attachment, which will be noted inside the stand.

At the right of the Show picture appear three well-known Wigwam boosters, who have been getting into the trade limelight of late in this country. At the top is Ray Seymour, erstwhile Indian speedster, who is now traveling one of the Indian sales circuits. In the center is Crocker,



struction. The lower photo in the center introduces Gene Coughlin, manager of the recently opened Riverside motorcycle establishment in New York City, and in the panel at the right appear Russell Smiley and "Shorty" Matthews, both as well known now in trade circles as they are on speed circuits throughout the union.

BUSY C. M. A. CONVENTION IN TORONTO

Canadian Governing Body Adopts F. A. M. Racing Classifications, Retains President Spencer, Decides Upon Registered Repair Shop List and Considers Several Knotty Competition Problems.

TORONTO, Ont., December 20.—A meeting of the Board of Directors on December 19 opened the second annual convention of the Canadian Motorcyclists' Association at the King Edward Hotel in this city. The session was featured by consideration of an application of the Wanderers M. C., of this city, for a charter and by an application of Bob Scott to have his trophies returned. Scott was recently dropped from the Toronto club. The trophies referred to were won by Scott at the Ontario championship races on October 28, and after the meet claims were entered that he had used a special engine in competing in the private owners' class. The trophies that had been awarded to him were recalled. Now the C. M. A. Board of Directors has decided that there was no conclusive evidence that Scott used a special racing engine in the Ontario races, and an order has been issued for the return of the cups.

The application of the Wanderers M. C. for a charter was voted down, it being asserted that several of the leaders in the new club had caused friction in the Toronto M. C. There are indications, however, that another application will soon be made and that the directorate may reconsider its present action.

President Johnson Opened Session.

President Johnson, of the Toronto M. C., opened the program on Friday, December 20, with an address. This was followed by the report of President Spencer, of the C. M. A. He stated that the Canadian association had grown to about 500 members and that new riders were being taken in daily.

In connection with the report of the Competition Committee a point was raised anent the suspension of Swanson for riding at the six-day bicycle meet at the Arena in Toronto. This meet had no C. M. A. sanction, but Swanson persisted in riding after having received a warning. He has been suspended for two years. Harold Cole, on the other hand, declined to ride at the Arena meet when the conditions were made clear to him.

Application for Big Meet.

There was a discussion concerning the applications submitted by various clubs for the Dominion championship meet, and it seemed to be the consensus of opinion that the races should go to a western city; it is likely that Winnipeg will land them if a suitable track is afforded. Applications are now in hand from Vancouver, Victoria, Hamilton, Winnipeg and Toronto.

Letters were read from President Patterson, of the F. A. M., and from Chairman Thornley, of the Federation's Competition Committee, expressing regret that they were unable to be present at the assembly, and wishing the Canadian association success in all its undertakings.

The directors were authorized to obtain a suitable design for a metal emblem to be carried on the machines of members of the C. M. A.

President Spencer Retained.

President Spencer was retained by a unanimous vote and Fred Johnson was also elected

to the vice-presidency without a dissenting vote. Mr. Schmall, of Welland, was chosen as honorary secretary, and W. G. Tite, of London, as treasurer. Directors: Nelson Chambers, Hamilton M. C.; G. W. Lillie, Victoria M. C.; J. Scott, Toronto Wanderers M. C. (not affiliated); J. W. Cunningham, London M. C.; W. G. Self, Wanderers M. C., Toronto; J. M. Moorehouse, Winnipeg M. C.

After a recess it was decided that the Board of Directors should arrange for the registration of repair shops throughout the Dominion and that a list of such shops should be prepared. The shop registration fee was placed at \$5. The Board also decided to offer \$25 for the recovery of a motorcycle stolen from a member, after the policy of the F. A. M.

Resolutions were adopted providing that the traveling expenses of directors to meetings of the board within a reasonable radius be paid by the C. M. A.; that the C. M. A. receive 10 per cent. of the net proceeds of the Canadian championship meet, and that the sanction fee

be withdrawn if the percentage amounts to more than \$40; that the club handling the big meet be required to stage at least 16 events; that the classification of racers as professionals and amateurs be adopted, in order that racing regulations in the Dominion may be in accord with those observed by the F. A. M.; that all applications for amateur standing must be preceded by six months' absence from professional competition.

Motions providing that no motorcycle dealer be permitted to hold office in the C. M. A., and that the date of the annual meeting be changed to the summer were defeated.

Annual Banquet a Success.

The annual banquet was held at the Prince Charles Hotel and was a complete success. Addresses and toasts featured the programme and the presentation of the Hamilton M. C. cup to Dan Davis, who won the five-mile private owners' event in the Canadian championships, added to the enthusiasm.

A WINTER PROGRAM

GRATIFYING reports from the various committees were read at the December business meeting of the Providence (R. I.) Motorcycle Club. The Entertainment Committee announced an excellent program for the winter months. First on the list was a smoker, which will be held December 31. A nominating committee was appointed to select candidates for 1913 officers, the election of which will be held the third Friday in January.

JAMESTOWN STAFF.

AT the last regular meeting of the Jamestown (N. Y.) Motorcycle Club George Powers was elected captain, and Walter Chamberlain, first lieutenant. The following committee chairmen were also appointed: Albert Johnson, racing and touring; Elmer Ostrander, house, and Clarence Palmer, publicity. The business meeting was followed by a light luncheon.

SUCCESSFUL NEWARK DANCE.

ABOUT one hundred couples were present at the third annual dance of the New Jersey M. C., of Newark, held on Wednesday evening, December 11. Joseph H. Glenn acted as floor manager, and was ably assisted by C. E. Holgate and R. S. Pascall. The reception committee was headed by Walter Goerke. The program was well patronized by the local dealers, and a page was set aside in memory of Eddie Hasha and Johnny Albright.

TRADE STATISTICS.

IT is shown by statistics from Washington, D. C., that during the first ten months of this year motorcycles and other cycles were imported by the United States to the value of \$129,901. In the same report the given value of exported motorcycles and other cycles is \$864,272. A record kept of the motorcycle exports alone, from July 1 to October 31, shows 859 motorcycles, valued at \$155,265.

WILLIAM MAROHN and W. T. Mallow, of Cleveland, O., are motorcycling from their home to New Orleans, La.

PROVIDENCE SHOW.

PREPARATIONS have been completed for the annual Automobile Show in Providence, R. I. The Show is of special interest to the Rhode Island motorcyclists, as the motor two-wheeler will figure prominently. B. A. Swenson, Rhode Island distributor for the Indian, has contracted for three spaces and will not only exhibit a full line of the 1913 models, but will also display an extensive line of accessories and motorcycle clothing.

NEW TORONTO CLUB.

ABOUT forty motorcyclists of Toronto, Ont., some of whom were formerly members of the T. M. C., met on December 10 at the Woodbine Hotel and formed the Wanderers Motorcycle Club. It is stated that Toronto has about 800 motorcyclists, and about 200 of them are members of the Toronto M. C. Jack and Bob Scott took a leading part in the organization of the new club. Officers for the first year were elected as follows: W. G. Self, president; Claud Pearce, vice-president; D. J. Davis, secretary-treasurer, and Jack Scott, chairman of the executive committee.

RIVERSIDE PROGRAM.

NEXT Saturday, December 28, the Riverside Garage, 533 West One Hundred and Tenth street, New York City, will give a housewarming to mark the inauguration of the 1913 season of the Reading-Standard product in New York City, Westchester and Richmond counties. The Metropolitan trade, many of New York's riders, representatives from the R.-S. factory and press men will be present, and the managers will have "eats" aplenty. The fun will start at 8 p. m., and the program is under the direct management of Eugene Coughlin, the manager, and G. E. Wood, president of the company. The proposed new Riverside Motorcycle Club will be discussed.

ABOUT twenty-five motorcyclists of Houston, Tex., met at the Indian salesrooms on December 13 and formed a club.

WHERE ARE STARS OF YESTERDAY

Eastern Motorcycle Speedsters Follow Widely Divergent Paths When Snow Flies, But All Are Keen For 1913's Opening Gun.

FROM time to time followers of racing pass along the question: What becomes of the speed stars during the winter season? and there is no denying that considerable interest attaches to the boys who spin the tracks and bowls, even when their motors have been temporarily laid aside or shipped to distant territory. It is impossible to keep in touch with more than a few of the record-chasers as they go into seclusion for the winter or jump about the country, but now and then a little information sifts in.

Arthur Chapple, the Brighton speed king, recently accepted a position with the Good-year Tire Company and is now traveling in New England territory. He reports brisk business and asserts that a period of actual work goes well between racing seasons. "Chap" expects to run down to Florida early in February and go after a record or two. He has his eye on the two-mile mark particularly, and has hopes of putting a crimp in it. There is also a chance that he may go abroad late in the same month and ride a few races on English tracks.

Billy Wray, another Brighton favorite, is putting in the winter in the employ of a motion picture company, while his younger brother, Howard, was at latest reports still nursing a severely bruised leg as the result of a spill suffered late in the racing season. Shields and Lochnar, winners of the 24-

hour race at the Brighton track late in the summer, are both in Syracuse, their home town. The former has the Indian agency there and the latter is employed by a Syracuse telephone company.

Johnny Cox, the New York boy who is recognized as one of the most popular and consistent speedsters in the eastern division, is working as a demonstrator of motorcycles in New York City and making good, as usual. He is devoting himself particularly to the new Indian models.

Mike Costello, another New Yorker who stands high in the estimation of speed fans, is now running his own shop in Yonkers and is handling the Indian agency. If business picks up, as there are indications that it will, Mike will probably be seen in few races in and about the metropolis next season. He states, however, that he has not retired from the racing game.

Earl Eckel is operating a garage in Washington, N. J., his home town and will not slip into a racing saddle again until the eastern bowls open. Earl is one of the riders who are content to store their motors during the winter in preference to making long jumps to more hospitable climes.

Johnny Constant, the Brooklyn meteorite, whirls into our sanctum under full throttle at regular intervals, announces that he has quit the racing game, then sticks in a proviso or two and finally admits that he may ride a few more races. And so it goes.

TORONTO ELECTION JANUARY 8.

AT the meeting of the Toronto M. C., held December 18, nominations for the ensuing year were made. The election will be held on January 8. A plan was outlined for a membership campaign, whereby prizes will be awarded to the four members bringing in the most new members before the first of June, 1913.

A CLEAN RECORD.

MISS MARY RECKLEBE, of Wichita, Kan., is a young woman who took up motorcycling because her brother did. Miss Recklebe rode a twin all last season, accompanying the boys on many of their outings, and never met with an accident.

GRAND RAPIDS STAFF.

THE 1913 staff of the Grand Rapids (Mich.) M. C. is as follows: L. Berridge, president; C. E. Gable, vice-president; R. O. Chipman, secretary; C. H. Blakeslee, treasurer; S. Veenstra, captain; C. C. Cline, first lieutenant; J. Foster, second lieutenant; R. E. Heath, sergeant at arms, and William Stadel and Howard Ferguson were named directors at large.

NORTH SIDE MOTOR SQUAD

THE entire length of the North Side boulevards and parks of Chicago are patrolled by the North Side motorcycle squad, which is composed of five men. This small body of riders has done much to maintain the traffic laws in the North Side section of the Windy City.

A SUNDAY run, over a 100-mile course, was recently held by the Red Bluffs (Cal.) Motorcycle Club.

GRAVES AND PERKINS WIN

Fast Finishes Mark Events Staged at Emeryville Track, with Perkins a Surprising Newcomer.

SAN FRANCISCO, Cal., December 9.—Marty Graves, the Los Angeles Indian rider, and Dudley Perkins, the San Francisco Wigwamite, took the laurels in the championship motorcycle contest held on the Emeryville track yesterday. Earl Armstrong, who will be remembered as one of the crack riders in last season's events on the Elmhurst motordrome, and who appeared for the first time yesterday in the present meet, came in for marked attention by his clever riding. He issued a challenge to meet Graves in a five-mile match race.

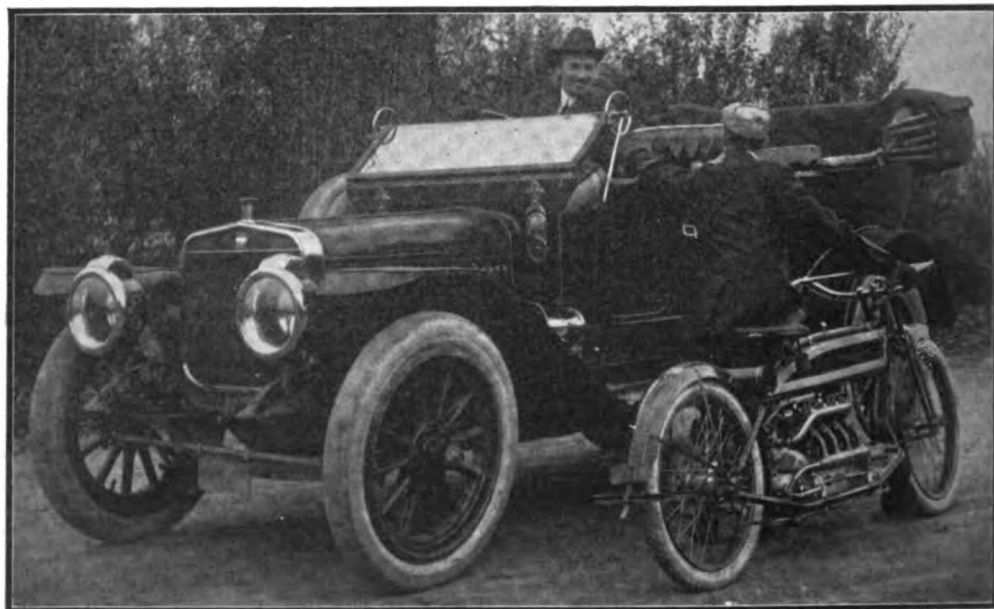
Graves and Armstrong met first in the opening heat of the three-mile professional event, in which the former won out by a small margin. Perkins shows promise of being one of the best dirt track riders in the West. George Renel, who came here heralded as the French champion and who promised to ride rings around Graves, was last in every event in which he competed and showed none of the daring that characterized the riding of the American boys. Lee Flickenstein, who was looked upon to do some fast work, put his machine out of commission in the first event.

A COMBINATION MEET.

AEROPLANES and motorcycles figured in a combination meet held at the Woodland race track near Dixon, Cal., December 7, and speed fans were present from all the towns within riding distance. It is stated that another similar program may be held during January.

NO less than 2,500 spectators witnessed the motorcycle races between San Bernardino (Cal.) and Redland club riders at the former place on Thanksgiving Day.

T. D. ZINN, of Parkersburg, W. Va., riding a 7 h. Indian, recently took five firsts out of seven events at the Parkersburg fair.

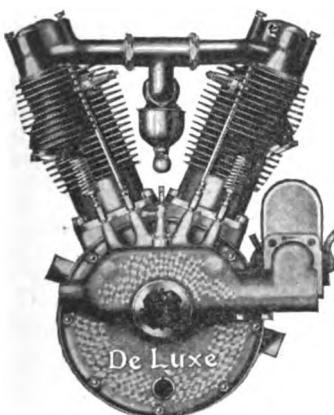


President T. W. Henderson, of the Henderson Motorcycle Company, at the Wheel of His Winton Six, Greeting R. W. Wheat, a Henderson Salesman, on Belle Isle.

DE LUXE MOTOR IMPROVEMENTS FOR 1913

Products of Spacke Machine Company Retain Fundamental Features While Introducing Several Noteworthy Changes—Racing Type Roller Bearings for Connecting-Rod Crank-Pin in Twin Models, Improved Splash Oiling, Enclosed Valve Levers and Pins and New Priming Device

WHILE the well-known line of De Luxe motorcycle motors, manufactured by the F. W. Spacke Machine Co., of Indianapolis, will embody for 1913 the same general principles shown heretofore, there are a number of changes and refinements worthy of attention, as pointed out in the formal announce-



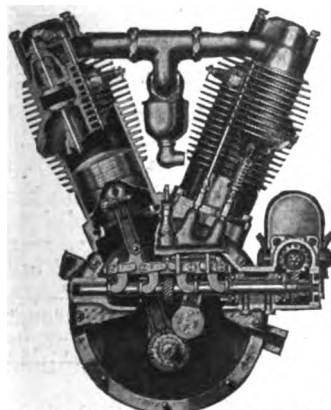
The De Luxe Twin, Made in 7 and 9 h. Types.

ment of the firm for the coming season. All the more important original features have been retained, among which are the rigid crankshaft, one piece crankcase with cover, improved cam and magneto drive and large import-

ends of the crankshaft, eliminating friction. The predominantly new points in the De Luxe motors for 1913 are the racing type roller connecting-rod crank-pin bearings for the twin motors, improved splash oiling arrangement, enclosed intake valve levers and pins and a simple priming device. That the new motors maintain the standard of quality which the trade has come to expect in Spacke products is evidenced by the fact that the company has already sold 15,000 motors for the coming season.

Racing Type Roller Bearings.

One of the most notable improvements in De Luxe twin motors involves the use of the De Luxe racing type of connecting-rod crank-pin bearing. The construction of this bearing is such that it is much larger in both width and diameter than other bearings of this style; it is not split into several bearings, each taking a separate thrust, but consists of one long bearing of ample area and great wearing qualities. The bearing rollers, which are hardened and ground, are contained in a steel cage and run between an inner and outer race, which are both hardened and accurately ground to size.



Striking Sectional View of De Luxe Twin Construction.

Improved Splash Oiling.

In connection with the fitting of the new type of bearing in the De Luxe twin motors, the oiling system has been modified, and an improved arrangement of splash oiling has been

adopted. The oil is introduced into the crankcase, between the cylinders and immediately over the crank-pin bearing, where provision has been made to take up the lubricant in such quantities as to insure at all times an adequate oil supply for this bearing.

Enclosed Valve Levers and Pins.

With reference to the enclosing of the intake valve levers and pins, a simple and effective arrangement has been devised. This consists of enclosing the upper end of the intake valve operating mechanism in a case, which is filled with hard grease and graphite, thus providing for the working of the intake valve pin and lever in a grease bath, and eliminating the necessity for the very frequent oiling which would otherwise be necessary. Further advantages are the elimination of the usual accumulation of dirt and grit in these moving parts, and the silencing effect of the covered mechanism.

Simple Priming Device.

In connection with the enclosed valve lever housing, a simple provision is made for priming on the De Luxe motors. By simply removing a screw the rider may inject gasoline, and thus obtain an easy start when exceptional conditions make such a procedure necessary.

On this page are shown illustrations of the interior of the De Luxe 4 and 5 h. single motors, and of the 7 and 9 h. twins. Another illustration of special interest is that which shows a skeleton or sectional view of the interior design and construction of the twin motors.

Four Standard Types.

As in the designing of previous models, it has been the aim of the Spacke experts to produce a line of silent, clean, fast and powerful motors without sacrificing sturdiness or simplicity, and it will be evident from the accompanying illustrations that they have been eminently successful. In this connection a diagram is reproduced on this page, showing the power performance of the 9 h. De Luxe twin special.

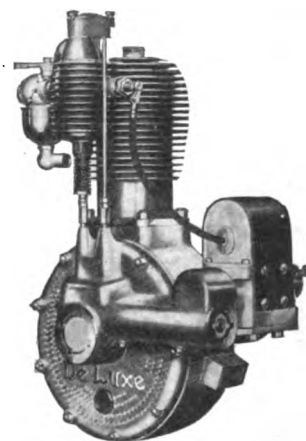
De Luxe motors will be offered to the trade, as heretofore, in four sizes: 4 h. single, 5 h. single, 7 h. twin and 9 h. twin special. They will be supplied for either belt or chain drive.

FOR WAR SERVICE.

IN discussing the possibilities of the motorcycle as a vehicle for couriers and for other emergency work in time of war, H. H. Windsor, a writer in *Popular Mechanics*, states that in his opinion the outcome of present tests will probably be a combination of motorcycles and bicycles. He refers to the fact that one motorcycle of any standard make is capable of towing four or five mounted bicycles over ordinary roads at from 15 to 25 miles per hour.

ENGLISH MILITARY TEST.

CONSIDERABLE interest was aroused by a recent run of 500 miles, made by two regulars of a motorcycle squad in the Highlands Division of the English Army. Two army sappers bearing the despatches from Aberdeen to the Lord Mayor of London, arrived at their destination safely after 37 hours of almost continuous riding. The ride was started shortly after 9 o'clock in the morning, and it was after 10 p. m. the next day when the worn-out riders reached London. A heavy rain and a strong head wind lasted for 13 hours of the trip.



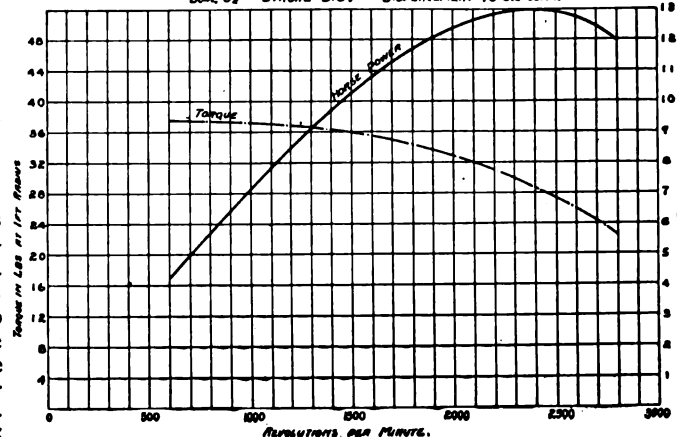
De Luxe Single, Produced in 4 and 5 h. Models.

FRICITION IN FRANCE.

A SPIRIT of discord pervades French motorcycle circles. For some time past the Automobile Club of France, which has a subcommittee for motorcycles, has been the governing body. Friction arose a few weeks ago when the Federation of French Motorcyclists was organized at Lyons. While the rules and regulations of the organizations agree, they both claim the right to control competitive events. The A. C. F. is determined to run its own program of events and disqualify any rider participating in meets not having its official sanction. The federation is resolved to do the same. Although the federation has the advantage in numbers, the A. C. F. has the backing of the manufacturers. The Automobile Union of England recognizes the A. C. F.

A CARMINE colored Emblem motorcycle recently was stolen from Jerry Walling, of Saddle River, N. J. The engine number was 4115.

TEST OF DE LUXE 9 H.P. TWIN.
Bore 3 1/2" - Stroke 3.67" - Displacement 70.62 Cu. in.



Power Chart of 9 h. De Luxe Twin Special.

NEW YORK'S \$50,000,000 ISSUE OF ROAD BONDS

THAT New York State does not intend to shirk its responsibility with reference to road improvements is indicated by the authorization, at the last general election, of an issue of bonds to the extent of \$50,000,000, for the completion of the system of State highways and to pay the State's share of the outlay for State Aid county roads. The system of state highways was authorized under laws of 1909 and later amendments, and is intended to cover 3,515 miles in all. About 2,000 miles have already been provided for in the plans of the Highway Department, and the remainder will be covered by \$20,000,000 of the new bond issue. The balance of \$30,000,000 will go to the State Aid county roads.

Recent amendments to the county road law provide that all town road levies shall

Empire State is Now Prepared to Complete Its System of Highways Covering More Than 3,500 Miles.

be reserved for the improvement of town roads, and the maintenance and improvement of country roads, as in the past, will be handled on a basis of 35 per cent. of the cost from the county and the remaining 65 per cent. from the State. The population of each county, the road mileage of each county, outside incorporated cities and villages, and the area of each county are each divided by three, and the addition of these three factors or thirds of population, mileage and area, for each county, as compared with similar factors from each of the 59 counties in the State, indicates the propor-

tion of the fund which each county will receive. Of the county highway system of 8,380 miles a little over 3,000 miles have been completed or are under contract, so there will be available about \$6,000 per mile for the State's share of the outlay for completing the roads in this system.

This arrangement, considered with the fact that there will be approximately \$13,000 per mile for completing the remaining 1,500 miles of the State highway system, gives assurance that both county and State roads are to be well cared for. It is worthy of note that the State and county systems are provided for separately, and that the State highways can be improved and built as rapidly as plans are prepared and contracts awarded, without interfering with the fund set aside for county roads.

NEW MARYLAND ROADS

State Highway Commission Has Been Reorganized and Many Districts Show Improvements.

GENERAL activity followed the reorganization of the Maryland State Highway Commission last spring, and the improvement work was kept up to such good effect throughout the summer that the State is now in possession of nearly 500 miles of good roads. To be exact, there are 465 miles of State roads in use, and with the money available for further work it is expected that this total will be increased to 800 miles in the not far distant future. It is the intention to treat nearly all the macadam roads with oil for the 1913 season; over 200 miles of highways were given the oil treatment this fall. The State has built 275 miles of road and has taken over turnpikes figuring up to 190 miles, thus making up the total of 465 miles above mentioned.

In nearly every county sections of roads are under construction. The Washington boulevard is nearing completion, except at the village of Elkridge, where work has been held up pending arrangements to obviate a dangerous grade crossing over a railroad line. With the exception of the stretch on Hanover street, in Baltimore, the Annapolis boulevard is practically finished, and funds are in hand to carry the work through. With this improvement completed and the new \$1,000,000 bridge constructed across the Patapsco river, a fine highway will be provided from the center of Baltimore City to Annapolis.

In Southern Maryland sand-clay-gravel roads are being built, and on the eastern shore there is no road material except oyster shells. These have proved unsuitable for main roads. Macadam is being used extensively, and in some sections it is likely that concrete will be worked into the more important highways.

SIGNPOSTING A DESERT.

SOME idea of the extent to which road improvements and signposting are receiving the attention of officials may be gained from the announcement that 150 signposts recently arrived in Barstow, Cal., for use in the Mojave desert. Heretofore

the Mojave desert trail has been one of peril, and several motorcyclists and automobilists who crossed underwent severe hardships. The purchase of the signs is the outcome of a campaign waged for years by the Los Angeles Times to have safeguards thrown out for the desert traveler.

MAY ADMIT MOTORISTS.

AS the result of a conference held in October the Yosemite National Park may be opened to motorists some time during the coming season. Walter L. Fisher, Secretary of the Interior, will not oppose motoring traffic through the park if a suitable route is found to and from the floor of the valley. The A. A. A. and the Automobile Club of Southern California are bringing influence to bear to have necessary improvements and road extensions made so that tourists, both automobilists and motorcyclists, may be admitted with safety to the park's scenic wonderland.

BUILDING CANADIAN ROAD.

WORK is now progressing on the King Edward Highway which is part of the Canadian portion of the Montreal and Miami Highway, extending from Longueuil to Rouse's Point at the international boundary. The construction is under the direction of the Provincial Government of Quebec.

WANT CROSS-COUNTRY ROAD.

A PROPOSITION is to be submitted to the Canadian Parliament for a transcontinental highway from east to west, a distance of 3,900 miles, says the *American Motorist*. It is estimated that the road would cost \$26,000,000.

MOTORISTS in Missouri are seeking State aid for the improvement of roads, and a bill may be presented to the next Legislature.

THIRTY days after the fund was opened for the construction of the proposed ocean-to-ocean highway the subscriptions exceeded \$1,000,000. This figure was reached about October 20.

WOMEN of Leanna, Kan., turned out in force recently and built a stretch of rock roadway 800 feet long through a cemetery, after the men of the town had shown a disinclination to make the improvement.

PROGRESS IN CALIFORNIA

State Highway Department Awards Road Contracts Under \$18,000,000 Bond Issue of 1910.

DURING the past summer a number of road building contracts were awarded by the State Highway Department of California, under the bond issue of \$18,000,000 authorized two years ago for a system of State highways. Provision was made in the system for a road down the coast, another along the valleys east of the coast range of mountains, and for various branches to reach the county seats not touched by the main highways.

When the bond issue was provided for it was taken for granted that macadam would meet all requirements as a road material, but the experiences of other states and the rapid development of traffic over California highways have led the officials to believe that a more durable surface is needed. There is considerable sentiment in favor of roads built of concrete with bituminized surfaces, and contracts have been awarded for several comparatively short stretches on this basis. In this connection, however, it has been pointed out that with the present bond issue it would only be possible to improve the roads near the cities, and that the plan for a State highway system worthy of the name would fail of its purpose. The officials therefore have two courses open to them: To proceed on the original specifications, under the \$18,000,000 bond issue, or to seek additional funds with a view of providing highways calculated to withstand the State's rapidly increasing traffic.

TOURING IN THE SOUTH.

MOTORCYCLISTS and autoists who go into Maryland, Virginia and North and South Carolina at this season are often given a surprise by the climatic conditions, says an exchange. While these States average considerably warmer than New York, New Jersey and Pennsylvania, for example, it is often uncomfortable to motor through them much later than the end of the northern season. The hilly sections of these States tend to offset the difference in latitude, and in order to find a marked difference in the climate it is necessary to go farther south.

MOTORCYCLE
ILLUSTRATED

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J. LEO SAUER
President

EDITORIAL
VIEWPOINTSTHURSDAY
DEC. 26, 1912

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H. N. CONDUCT
Secretary

ELSEWHERE in this issue is a brief but timely reference to the national information bureau maintained for dealers under the auspices of the Motorcycle Manufacturers' Association. It is stated simply that the bureau is supplied with a new batch of helpful literature and suggestions, preparatory to the opening of the 1913 selling season, but this announcement should be sufficient to start a deluge of postcards flowing to the Indianapolis headquarters of the bureau. Here at last is offered something for nothing—if we are generous enough to overlook a moment's time and the outlay for a postcard. There is no other cost.

Acting upon the sound theory that the advancement of one predicated an influence for the uplift of all, the manufacturers of motorcycles have gone to great pains and considerable expense to establish the information bureau and place it upon a practical basis. They ask in return that dealers throughout the country co-operate with them to the extent of applying for the literature, and the specially prepared advertisements, and of using both to the limit of their individual opportunities. Manufacturers realize, of course, that every satisfied, enthusiastic dealer is a valuable asset; that enthusiastic dealers are over the sales-makers, and that all our sentimental interest in the future of the motorcycle will avail us nothing if we neglect to reach out for those thousands of potential recruits to be found from coast to coast. In short, manufacturers need sales, but no more than the dealers need them—and certainly no more than the sport needs them.

After all, what is the psychology of sales-making? Is it to be summed up in contracting for new models, placing them in a showroom and then settling down to wait for the chance patron who may have decided that he needs a motorcycle? We venture the opinion that there is little of psychology—or any otherology—in this. No, scientific selling implies the ability first to produce a need, if necessary, and then to fill it. It means that the dealer must clear away any erroneous impressions concerning the motorcycle that may befog the public mind in his district; that he must sow the seeds of friendly interest during every waking hour, and finally that he is to approach each prospect with the most practical, appealing arguments available for the individual case. The latter is two-thirds of our high-brow, friend psychology—reduced to plain, straight-from-the-shoulder dollars-and-cents English. There's nothing more to it. Simply show a prospect why he needs a motorcycle, and the sale will make itself.

But clearing away the unfavorable impres-

sions, sowing the aforementioned seeds of interest and tucking a productive suggestion into the mind of a near-patron at just the proper time and in the way that will do him and you most good are phases of a fine art. They come naturally to but very few of us. We need training; we need to profit by the experience of others if we are to progress rapidly, and this special training and the advantages of just such experience are offered by the national information bureau for dealers. That's why your postal is bound to bring you something that will advance you as a salesman.

WOULD there not be a field for the sale of a replica in metal of the F. A. M. emblem, constructed so as to be adaptable for fitting to the front mudguard or the top of a lamp? There can be no doubt that such devices are aids to dignified publicity; that they enliven club pride and exert an influence favorable to cohesiveness in an organization, the latter property being especially needed where members are distributed over such a wide area as our own country. Perhaps there is such an F. A. M. device on the market, but we do not recall having seen one. They are quite common among motorcyclists in England and other European countries, and there appears to be no worthy reason why our governing body should not be similarly represented on the roads.

ATTENTION has been called to the fact that the English Auto-Cycle Union classifies its records according to the size of the motor used, and a recent correspondent suggests that it might not be amiss for our own governing body to consider a sub-classification in order to permit of 30.50 records, for example, on this side. This is an idea that may properly come in for consideration by the F. A. M. at no far distant date, especially in view of the fact that the English 30.50 hour record is now quite close to our own 61.00 mark. It is likely that the recognition of 30.50 records in this country would do much for the development of the single-cylinder machine, although such a course would no doubt bring its drawbacks in the way of further complications for the F. A. M. Competition Committee to untangle.

BALTIMORE motorcyclists petitioned the police authorities of their city to rule against the use of certain streets by juvenile roller-skaters, on the ground that the youngsters dodged to and fro in such fashion that riders could not gauge their movements, and with little loss of time a restrictive ordinance was passed. There is a regrettable impression

among motorcyclists that they can never hope for anything but speeding fines and general antagonism from police officials, and the achievement of the Baltimore riders is notable as showing results to the contrary.

THEY presented a dignified appeal on reasonable grounds and found the authorities ready to meet them half way. Life might be pleasanter for both motorcyclists and police officials in many other cities if a similar policy of co-operation were to be persisted in. After all, traffic cops and their superiors are human beings, not merely blue-coated machines fired with a diabolical determination to chase motorcyclists off the map or wring their last simoleon from them on sight. Keeping this in mind will often work wonders.

IT is at least consoling to know that American motorcycle manufacturers who exhibit in the national shows will not have to contend with the elusive cyclecar of our English brethren, which refuses to be definitely cataloged. On the other side the cyclecar's comparatively slight claim to relationship with the motorcycle kept manufacturers of the latter on the anxious seat during the Olympia Show, while the growing realization that the cyclecar is, after all, only a speedy, low-priced automobile gave builders of the standard four-wheelers many an uneasy moment.

THAT the word "refinement" is sprinkled liberally throughout the announcements of 1913 models is significant. It implies that wide-awake designers and engineers have not as a rule, found radical changes from 1912 construction justifiable. Even where several marked alterations are shown in a new model it will be noted that much of the ingenuity of the designer has gone into the refining of parts and fittings, thus indicating that the basic ideas involved in the latter have proved their worthiness.

CLEVELAND'S motorcycle show for 1913 will share 60,000 square feet of exhibition space with the automobiles. Dope from the Ohio city says: "Play Cleveland in the money. New York and Chicago Shows a dead heat, and Cleveland a good third."

ENGLISH motoring circles are agog over the promised advent of a cyclecar fitted with a two-stroke twin engine, a departure in power plant makeup for these vehicles.

MORE motorcycles than have appeared there for years past were shown in the recent automobile, motorcycle and cycle show in Paris.

ENGLISH NOTES "BRITISHER"

Olympia Show Proves
Cyclecar Boom Premature;
Three-Speed James Motor-
cycle Scores a Hit; A. S. L.
with Air-cushion Springing;
More Cyclecar Designs.

THE briefest glimpse of the glittering stands in the leviathan exhibition at Olympia proved that ardent riders and a hotheaded press have hustled the trade along too fast in the direction of cyclecars. If I omit the half-dozen makes which have made good on the road during the last two seasons, there were not four makes in the Show I should care to buy. It is a bad sign when a maker is afraid to exhibit a stripped chassis with naked works; it is a bad sign when you find the floorboard nailed down, so that you cannot scrutinize the innards; it is a bad sign when a maker has no demonstration vehicle waiting at the entrance, for you to make a road trial; it is a bad sign when you see a machine marred by grievous technical flaws, sure to create trouble within a hundred miles on the road.

Beyond contradiction the sudden and artificially-stimulated boom in cyclecars has caught the trade napping. Many firms have hastily gummed together a few bits of metal, dumped a pretty little red torpedo body on top, with a rakish scuttle dash, and called it a cyclecar. Quite a number of the vehicles exhibited have never smelt the road at all; few of the makers have got their jigs set up, or organized their production, or even fixed on their final specification. One much-boomed example was feverishly varnished in the freight van as the express train rushed it up from Coventry. On the whole I much question whether a number of builders will be able to make deliveries inside six months; and when deliveries begin it is doubtful whether the first batch that gets through from some of the factories will be up to much real work. I estimate that the passenger vehicles of 1913 will be chiefly limited to sidecar outfits, to the pioneer cyclecars introduced in 1910-1911, and to three or four of the new débutantes. Nothing startling need be expected of most of the new designs.

Cyclecars on the Road.

SOME twenty samples were marshalled at the big entrance portico, and were kept very busy giving joy rides to the "nuts." Few of them looked at all smart. The majority resembled a coal scuttle on perambulator wheels, and their fair passengers screamed when a huge motorbus loomed close to the low flat seats. Off-hand, one would ex-

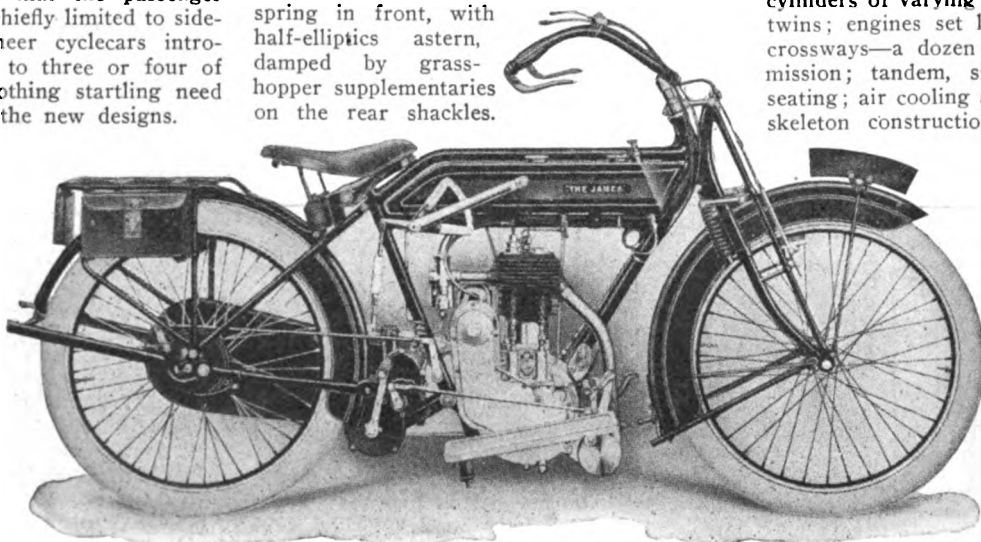
pect wire wheels to look their best on such tiny machines; but actually the only really smart cyclecar was the Singer, which has detachable steel artillery wheels (Sankey patent). Others were grossly disfigured by motorcycle engines. A V-twin engine, with cylinders at 50° and small enclosed flywheels does not readily run slowly, and is uneven when throttle down. Add the sharp terrier bark of a motorcycle exhaust, and it is obvious that the cyclecars were not impressive, as they stood by the curb with engines racing free.

I except two or three small four-cylinder engines with good carbureters and efficient mufflers; also one or two twins, with 90° or vertical cylinders, and heavy outside flywheels. One thing is certain, viz., that the 90° twin will soon oust the 50° type for cyclecar use, and that a heavy outside flywheel of large diameter will displace the usual motor-bicycle type. It gives as good a balance as a four-cylinder.

Widely Varying Transmission.

THE firms who make a specialty of supplying engines are all turning out huge 90° twin-cylinders of about 1,000cc. capacity, with heavy-rimmed external flywheels of large diameter; but at the moment the demand for these engines exceeds the supply, and in addition existing chassis are seldom suited to them. When the power reserve is small, it does not pay to set the engine athwart the frame, and lose power by right-angled transmission; but if the 90° engine is set longitudinally, the chassis has to be lengthened and all jigs renewed.

The springing was better than I expected, but varied much in type; a common design consisted of a traverse spring in front, with half-elliptics astern, damped by grass-hopper supplementaries on the rear shackles.



The James Three-Speeder, a Striking Model in the English Show.

These gave quite comfortable riding on city pavements at 20 miles an hour; but, of course, a quarter-ton vehicle is bound to joggle a bit on country roads at high speeds. The seating accommodation was sparse on many types; some of the seats were only 34 in. across and 12 in. deep. Transmission embodied every conceivable type, including belts in various combinations, chains and belts, gear and belts, gear and chain, gear and bevel shaft, gear and worm shaft, chain and friction disc.

Sociable Seats in Demand.

TANDEM seating was obviously at a discount, and the side-by-side method of seating is certain to become standard. Tandem seating is very popular on the light imported French machines, which are too flimsy to make good over here. There were plenty of three-wheeled cyclecars on exhibition, some of them very strong and heavy. The two main drawbacks of this type are the difficulty of making the back wheel easily removable and the difficulty of keeping the back wheel vertical when its tire is deflated (any failure to keep the back wheel permanently vertical and in track spells a smash, being equivalent to a steering failure). Knockout spindles, spring-clip chains and snick-jointed brake rods dealt efficiently with the first problem, and the second is usually tackled by mounting the rear wheel spindle on a rigid rear frame and superimposing quarter elliptic springs which insulate the tail of the coachwork only.

At present confusion reigns supreme; you get three-wheelers with both one and two-driving wheels; four-wheelers; twin-cylinder engines of 1,500 cc., singles of 500 cc., four-cylinders of varying capacities, V and vertical twins; engines set longways and engines set crossways—a dozen different types of transmission; tandem, side-by-side and vis-à-vis seating; air cooling and water cooling; spider, skeleton construction on bicycle lines, and small scale fac-similes of the millionaire's automobile de luxe. Es-saying the risky role of the prophet, I outline future crystallization of stereotyped design along two main lines, somewhat as follows:

1.—Cyclecar de Luxe.

Four-cylinder water-cooled engine of 1,000cc. Three-speed and reverse gearbox, channel or pressed steel frame, cone clutch,

bevel drive with two enclosed universal joints, detachable wheels, full automobile specification, coach-built torpedo two-seated body, selling at about \$900.

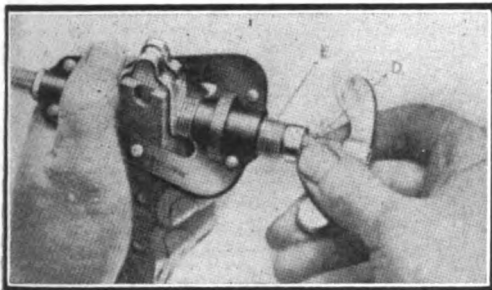
2.—Ordinary Cyclecar.

Light tubular frame, air-cooled engine, either 1,000cc. twin or 750cc. single-cylinder long stroke (say 85mm. x 130mm.); engine carried in front under dummy bonnet with wire-mesh front; drive by chain or shaft (through clutch) to countershaft, on which are mounted variable belt pulleys, whence drive goes by 1½-in. belt to drums on rear wheels; solid rear axle, corners being negotiated on belt-slip; light skeleton body, very low, of two-seater torpedo type. Selling at about \$450.

Some Leading Cyclecars.

I HAVE already described the leading pioneers, of which the two to achieve real success are the G. W. K. and the Morgan. The G. W. K. is outwardly a small automobile; it has a dummy bonnet in front, and under its rather long and ugly tailboard is ensconced an 8-10 h. twin-cylinder vertical engine, driving the rear differential axle by friction discs. It costs \$750, complete with hood and screen. The Morgan represents the limit in lightness and simplicity. It is a three-wheeler of the single driving type.

A V-twin air-cooled engine is set athwart the frame in front, under a dummy bonnet;



Lycett Belt Punch, an English Novelty.

this engine measures 85mm. x 85mm. and drives through a cone clutch and propeller-shaft to a gearbox set just forward of the driving wheel; the gearbox consists simply of a sliding dog clutch, which couples up either of two chain and sprocket drives to the rear wheel. The body may be either a single or double-seater, at the buyer's discretion. As the entire chassis only scales 250 pounds, it is plain that this is a very lively and rapid little mount. It costs under \$400.

Three New Cyclecars.

THE cream of the newcomers are the Swift, Singer and Perry. I append brief specifications of each.

Swift.—Small car type, water-cooled vertical twin-cylinder engine, 75mm. x 110mm., in front under bonnet. Bird-fountain oiling, thermo cooling, leather cone clutch, three speeds and reverse (sliding gear, direct on top). Bevel drive, differential axle, tubular frame, with engine and gearbox on tubular sub-frame. Rack and pinion steering. Price \$682, with hood and screen.

Singer.—Channel steel frame, inswept at dash, unswept astern. Four-cylinder water-cooled engine, cast in pairs, 63mm. x 88mm. (top speed, 45 miles per hour; runs 45 miles per gallon of gasoline). Forced pump lubrication, propeller-shaft drive to three-speed

and reverse gearbox mounted on back axle. Five detachable steel artillery wheels. Streamline torpedo two-seater body, with side doors, taper bonnet and scuttle dash: 7 ft. 6 in. wheel base. Tires, 700 x 80mm.; domed mudguards; automobile control. Price \$925.

Perry.—Two-cylinder vertical water-cooled engine, 72mm. x 108mm.; chain-driven timing gears and magneto, clutch-case and three-speed gearbox bolted to crank-chamber on unit lines; shaft-drive to overhead worm on rear (differential) axle; De Dion type plunging joints at both ends of shaft; channel steel frame; four brakes on rear hubs. Price, \$800.

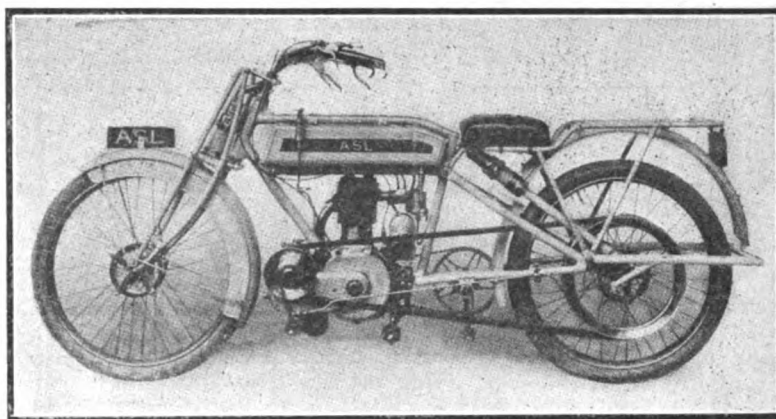
The James Three-speeder.

TWO motorcycles in the show struck me as embodying the lines on which future progress in Great Britain is most likely to be based. The three-speed gear is already admitted to be our ideal, but only two or three makers have succeeded in perfecting a light and reliable three-speed box for the countershaft position. Of these I illustrate the James, which has an 86mm. x 96mm. single-cylinder engine, with staggered radiating fins, effecting the maximum cooling effect. The three-speed gear is mounted as a bottom bracket countershaft, thus concentrating the weight in the center of the wheelbase and securing an easily removable back wheel. The drive consists of two totally enclosed chains. The front chaincase is a very handsome aluminum casting, longitudinally split, and the rear chaincase is of sheet steel; both contain oilbaths. In the gearbox is embodied a neat kick-starter, and the labor required to operate the kickstarter is considerably reduced by means of a decompressor; the decompressor operates on the exhaust cam and is controlled by a handlebar lever and encased flexible wire.

The gear is very simple, consisting of a layshaft and sliding dogs. It is controlled by a substantial lever, working on a spindle carried in a lug brazed to the lower top tube of the frame, just under the tail-end of the gasoline tank. This model costs \$315, and scales 240 pounds. It may be had with lugs brazed to the frame, ready to hold sidecar fixings immovably; and it presents the thickest cream of our motorcycle industry. Its rivals will follow these lines next year, though the three-speed hub makers are trying to adapt their gears for the countershaft position, in which case all-chain drives are not likely to be popular.

Riding on Air.

ONE of the finest spring frames I have ever bestriden is made by a firm known as "A. S. L. Patents," and their system consists of hydraulic pistons. The spring forks and rear frame unit terminate in blunt-headed pistons working in metal dash-pots, but the pistons operate not against coiled metallic springs, but upon cushions of air. The joint



English A. S. L., with Air-Cushion Springing in Rear.

is preserved by what is known as a "mitten"; in other words, a small cylinder of rubber-proofed fabrics, of which the exact composition is a secret. The fabric has necessarily to be exceedingly tough, as it is subjected to continual friction, and is fixed by metal locking rings.

I find that such a mitten will last about 1,000 miles, and its cost is \$3. This is a trifle expensive, but for really rough roads it is well worth its price, for I have found the machines comfortable when fitted with only 24-inch wheels, and a rigid saddle, even over the worst going. One great merit is that the strength of the springing is always adjustable, for a tire valve is mounted on the dash-pot, and the pressure of the air can always be raised or lowered at will. The success of the firm has been hampered in the past by a freakish liking for 24-inch wheels, and the substitution of a church hassock for a saddle. However, they are now manufacturing on more conventional lines, and they are selling a separate spring seat-pillar which will serve to advertise the merits of their patent. When they can cheapen the cost of replacement mittens they will make good over all metal springs. A cut shows the outline of a complete A. S. L. machine.

A RUN TO SALINAS.

MEMBERS of the San Francisco M. C. participated in a run to Salinas, on Sunday, December 15. The course was via Pescadero and Santa Cruz, and the return was by way of Gilroy and San Jose to Oakland.



H. B. Cohen, Secretary of the National Capital M. C., of Washington D. C., and a Motorcycle Booster of the New School.

MOTORCYCLE IMPROVEMENT CONTEST

First Prize, \$50 in Cash

Second Prize, \$25

Third Prize, \$15

Fourth Prize, \$10 Total, \$100



FINAL SELECTIONS IN CONTEST

BELOW are the final selections in the Improvement Contest, received before December 20, the closing date assigned. Over one hundred contributions have been received since the first announcement, but only a moderate proportion of them could be considered eligible. There were numerous cases of contestants submitting similar ideas, and those whose letters reached the Editor first were given the preference, in cases where merit was equal. We recapitulate the more important conditions of the Contest herewith:

Points that will be considered in judging are: (1) necessity, (2) safety, comfort and convenience, (3) adaptability, (4) mechanical per-

fection, (5) reliability, (6) manufacturing cost, (7) durability, (8) simplicity, and (9) neatness.

In the event of a tie for any prize on the above method of scoring points, such a tie will be broken by considering the extent to which the suggested improvements would respectively add to the popularity of the sport or the commercial value of motorcycles.

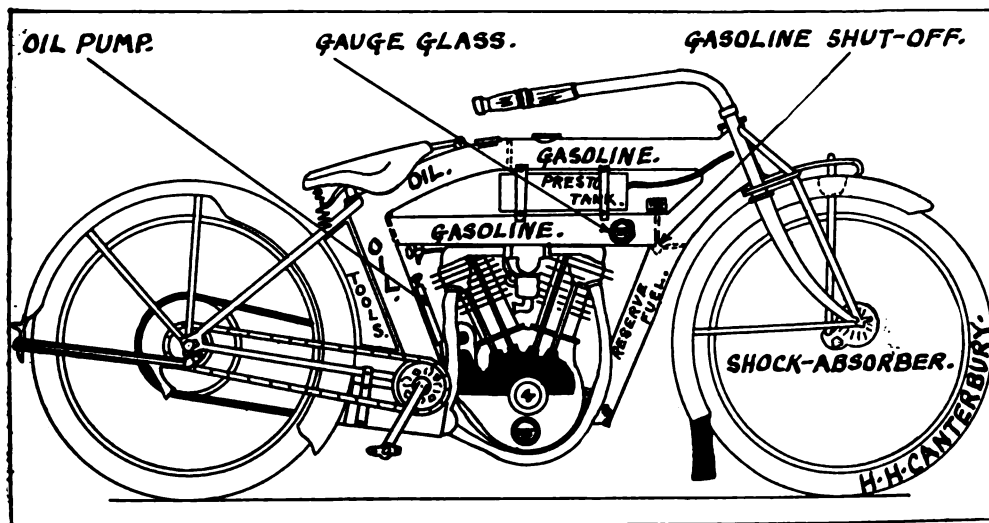
The prize winners will be determined on the point system as outlined above by the editors of *MOTORCYCLE ILLUSTRATED* who, in making their announcements, will give the detailed scores of at least the twelve best suggestions.

The four winners will be announced in the next issue, that of January 9, and the prize designs will be republished.

TANK FRAME CONSTRUCTION.

A TANK FRAME with special arrangements for oil and gasoline, and a space for a Presto-tank is offered in the Improvement Contest, as shown herewith. The tubing is to be $3\frac{1}{2}$ inches in diameter with the cradle loop $1\frac{1}{8}$ inches only. A reserve section for gasoline is controlled from the lower tube, and a pet-cock is fitted to draw off the

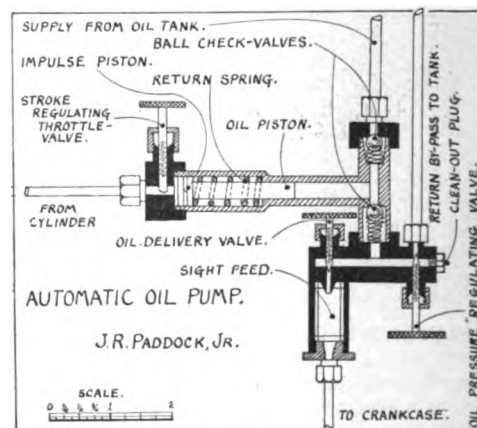
contents when desired. A sight-glass is fitted to the lower tank member as shown. The drive is a combination one; chain to the countershaft and V-belt to the rear wheel. The Presto-tank is carried in clips in the space between the top and lower horizontal tubes. To the front rockers are fitted friction disc shock absorbers of the automobile type. Contributed by H. H. Canterbury, Redlands, Cal.



AUXILIARY OIL PUMP.

A POSITIVE oiling system which will give an amount of oil according to the speed of the motor and regularly instead of at intervals is here shown, adaptable to any motorcycle. All working parts are easily reached for adjustment and the cost of making would be low. The impulse piston is operated by the motor piston, moving to the left on the suction stroke and to the right on the compression, firing or exhaust stroke. As soon as a "working" stroke has been completed, the return spring forces the impulse piston to

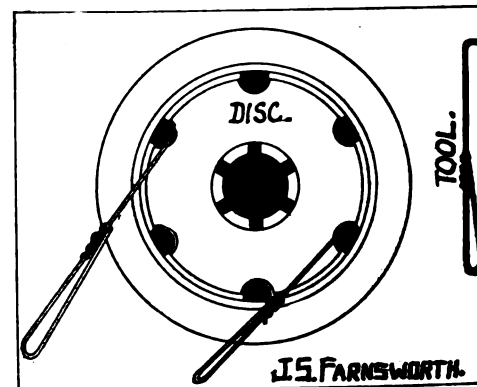
the left again. Within the pump body is fitted the oil piston, forming part of the impulse piston. When the latter is moved to the left by the spring, the oil piston draws a charge of oil through the supply pipe, unseating the upper ball valve. On the pistons moving to the right, the upper ball valve closes and the lower one opens, the oil being sent into the chamber having the oil delivery valve and pressure valve at opposite ends. The rider can regulate the amount of oil in this chamber by the pressure regulating valve, there being a by-pass returning surplus oil



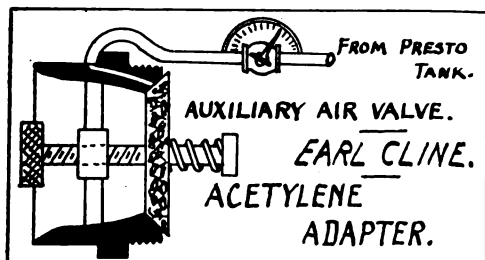
to the tank. The drip through the sight feed is regulated by the delivery valve. By adjusting the stroke regulating valve, the pressure (from the cylinder) on the impulse piston can be adapted to suit the running of the motor. Contributed by J. R. Paddock, Jr., East Orange, N. J.

REMOVING CLUTCH PLATES.

IT is sometimes a very tedious task to remove the plates from a multiple disc clutch, especially when they are clogged with gummy

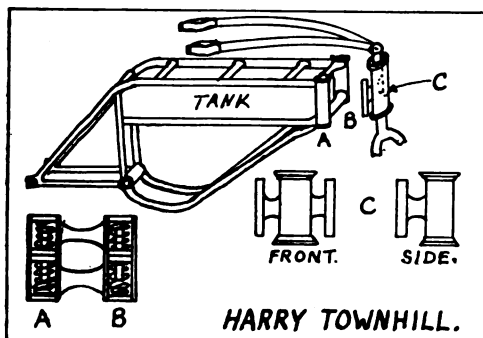


oil. The tools shown herewith are made from pieces of stiff iron wire, having a loop handle at one end and a small hook at the other. The tools are inserted in the notches on opposite sides of the plate, when the latter can be removed in a few seconds. Contributed by Jerome S. Farnsworth, New York, N. Y.



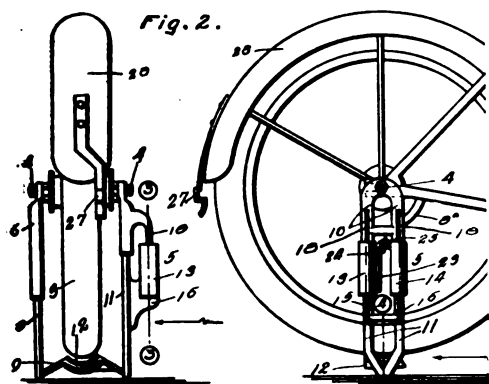
DUPLIX FRAME.

TO prevent side-swing when striking bad
ruts, etc., a duplex frame with the mem-
bers connected by cross-pieces is suggested.
There is but one fork head, C pieces from
this head fit within cylinders A and B as
shown in the main view and in detail. Con-
tributed by Harry Townhill, Cleveland, O.



A NOVEL STAND

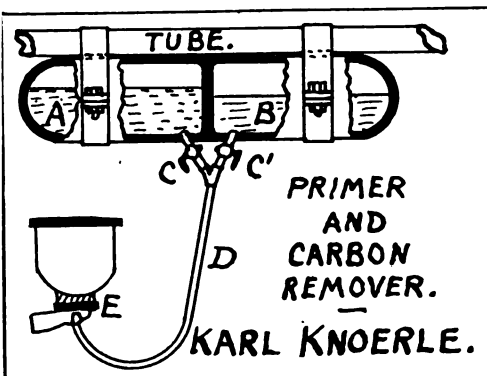
WITH a view of producing a motorcycle stand device that will enable a rider to place his machine in motion without dismounting to raise the stand after starting his motor, Samuel T. Steinberger, of Peoria, Ill., has invented the attachment illustrated herewith and obtained patent 1,039,838. Figure 1 shows



a side view of the Steinberger device and discloses the cylinders upon which the inventor depends for results. The cylinders permit of a telescopic action, which takes place when the rider releases a valve in a duct or pipe connecting the cylinders, and thus the rear wheel of the machine is lowered gently until it strikes the shoe of the stand and pushes it backward, the rear wheel of the machine being in driving motion at this time. When the stand is pushed backward the wheel reaches the ground and the stand device is automatically carried up until it is caught in the regulation holding clip on the mudguard.

ACETYLENE ADAPTER.

TO run out of fuel occasionally is the lot of most users of the two-wheeler, but the rider who has an acetylene tank and fits the following attachment can get home on the dissolved acetylene contained therein. The shell of the auxiliary air valve casing is formed with a canal whose exit is in the bevel seat of the leather air valve. The outer end is connected to tubing communicating with the gas tank, a cock with graduated index being interposed in the line. When the gas is to be used, the cock is opened and the air valve spring has its tension adjusted to suit. The gas is fed only when the valve lifts, and the device thus acts like a mixing-valve, such as is used on motorboat engines. Contributed by Earl Cline, Marietta, O.



PRIMER COMBINATION.

A COMBINATION priming attachment and carbon remover is here shown. An auxiliary tank is fitted to the frame and divided into two compartments, to a Y connection are fitted two tubes C and C', communicating

The operation of the cylinder system to produce the telescopic action is rather intricate. The valve above referred to may be adjusted to the weight of the rider, so that when it is opened—by any connecting arrangement the rider may desire—it permits of a varying flow of oil or other liquid between the cylinders, and this coupled with the action of coil springs that are housed in the cylinders allows the rear wheel of the machine to be lowered slowly to the ground to disengage the foot of the stand.

NEW MOUNT STOLEN.

A 7 H. BELT-DRIVEN Excelsior, 1913 model, is reported as having been stolen from the Ford Motorcycle & Auto Supply Company, of White Plains, N. Y. The words "Ford Motorcycle Co., White Plains, N. Y., Distributors" were stamped in the top of the valve-gear case. The engine number is 38,624. A reward is offered for the recovery of the machine.

A MOTORCYCLE GUN.

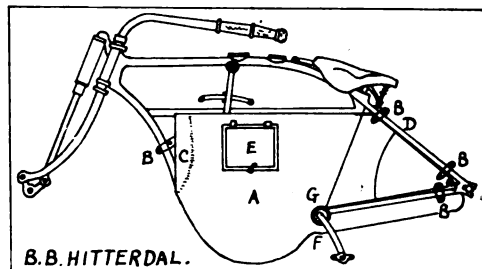
FOLLOWING the adoption of the motorcycle for army service in England, a motor-mounted quick firing gun has been produced.

OFFICERS FOR 1913.

AT a recent meeting of the Butte (Mont.) M. C., officers for the coming season were elected as follows: Mike Cannon, president; W. M. Buzzo, vice-president; B. Opie, treasurer, and Will Sherwood, secretary. Jack Conway was chosen captain.

A membership gain of 50 per cent within the last year is the boast of the Atlantic City (N. J.) M. C.

respectively with the gasoline in A and the carbon remover fluid in B. A pipe D leads to the air intake of the carburetor E. By opening either cock and turning the motor over, it may be primed or have the carbon cake loosened. Kerosene is recommended as the carbon remover. Contributed by Karl Knoerle, West Plains, Mo.

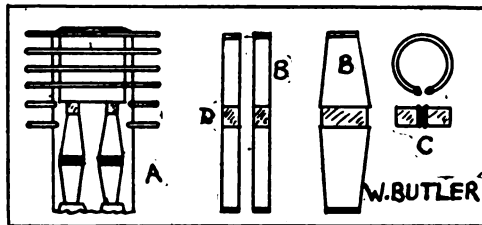


ENCLOSED MOTORCYCLE.

AN enclosed motorcycle is suggested, the enclosure being made by a shield A on each side fastened with brackets B in five places. At C the shield is bent to act as a scoop and force the air to the cylinders. A cut is made along it at D, and a door is fitted at E to give access to the carburetor. G is a hole for the pedal crank and at F it follows the frame line again. The shield protects the rider from oil and the motor from dirt and water. Contributed by B. B. Hitterdal, Hitterdal, Minn.

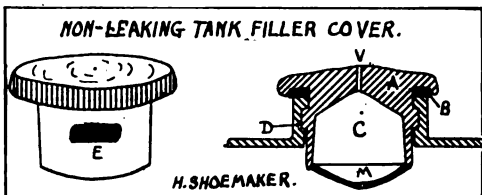
GUARD AND SILENCING DEVICE.

A DEVICE for fitting around the valve stems and springs of a side-by-side motor to render the operation quieter and guard the rider from oil, etc., is here illustrated. The guards are in the form of half circles BB and are channeled at their center parts for a collar C which locks them together fitting into the channels D. The parts B are to be made of thin tin and C can be made from a clock spring. Contributed by Walter Butler, Calistoga, Cal.



NON-LEAKING TANK CAP.

WITH a full tank of gasoline, many vented tank filler-caps are prone to leak, and when fitted to a threaded collar often are removed with difficulty. A cap to overcome these disadvantages has a bayonet-lock, the cap carrying the studs E on the body A. The collar D is grooved for the joint and there is a washer B for sealing against leakage. The cap has a chamber C and is provided with a hollow metal bottom, which has a vent in it. The upper part of the cap is also vented at V. Any gasoline that enters the lower vent is held in the chamber C and drains down again into the tank. Contributed by Harold R. Shoemaker, Syracuse, N. Y.



QUESTIONS and ANSWERS

WHILE the answers to Question No. 11—"Why are the cylinders of a twin motor fitted at an angle?"—were, as a rule, most excellent, the matter of cooling apparently did not occur to any of the contributors. Some of the reasons given were susceptible of questioning; thus there might be a four-cylinder motor with cylinders at 15 degrees arranged as a square, in block, with each pair working on a crank and taking up but slightly more space across the frame than a single or twin. Now, with water-cooling this type has been very successful, but never with air-cooling. The weight would be about the same as that of a twin of equal power, and the crankcase would be no longer than on a single. It would be adaptable, therefore, to any motorcycle frame, and the twin would not be the only type.

To Leo. J. Egelberg, of La Crosse, Wis., is awarded the first prize, while Harry C. Sundgard, of Frankford, Pa., receives the second.

This series of contests closes with the present issue, and announcement of the final winners will be made in the next issue, that of January 9. Contributors should submit answers to the last question as soon as possible so that the work of judging and awarding prizes may be facilitated. All answers, and communications referring to the contest, should be addressed to: "Editor Questions and Answers, Motorcycle Illustrated, 51 Chambers street, New York."

Below is given question No. 12, that for which answers are now being received. Answers to this question will be published in the January 9 issue with the closing awards.

Question No. 12. How can the proper operation of a battery and coil system be best determined?

CYLINDERS AT AN ANGLE.

(Question No. 11.)

FOR answers submitted to this question, Leo J. Egelberg, of La Crosse, Wis., has been awarded the first prize, and Harry C. Sundgard, of Frankford, Pa., the second. Egelberg's answer was as follows:

"Practically all two-cylinder engines designed for motorcycle propulsion are of the V-shaped type, having the cylinders fitted to the crankcase at various angles with each other, usually 42, 45, 50 and 90 degrees. In view of the general adoption of this type of engine, it is reasonable to assume that such construction offers advantages not obtained with any other in use today.

"Of these advantages, the most important would seem to be the considerable reduction in engine weight and the compactness of design obtained. This practice of placing two cylinders directly opposite and at an angle with each other is noticeable in aviation work, where weight reduction is an important factor. The V-shaped twin permits the working of two cylinders on one throw of the crankshaft, and the size and weight of the shaft and crankcase are practically no greater than in a single cylinder motor and considerably less than in any other type of two-cylinder engine.

"Considering the question of appearance, this type unquestionably is capable of producing a very pleasing effect, lending itself perfectly to the form of frames in general use. The design is neat and at the same time one that utilizes space to the best advantage.

"The type under discussion admits of much simplicity in transmitting the power to the

rear wheel. The crankshaft being placed crosswise in the frame, no bevel nor worm gears are necessary; the drive is a line one. An important viewpoint on the part of the manufacturer is the absence of complication where both single and twin motors are built in the same factory, this being due to the great similarity of the two types. As regards mechanical and explosion balance, the V-shaped twin is not equal to any other two-cylinder types, but this is not a very serious argument against it in view of its superior qualities."

Sundgard's Answer.

Sundgard's answer follows: "The requirements of the motorcycle are such that the power plant must be as light as possible and occupy the least amount of space. Now, suppose we consider the various arrangements possible for a twin motor. First, the cylinders could be opposed. The weight would be about the same as the present type of twin, but the engine would be too long to be accommodated on a motorcycle without making the machine either too long, or the center of gravity too high. Second, the cylinders could be set upright on the ordinary barrel type of crankcase and with a two throw crankshaft. With this arrangement we encounter, first of all, transmission complications. Obviously the motor must be set so its length lies with the length of the machine. This puts the direction of rotation of the crankshaft across the machine and necessitates an angle drive, which adds to the cost of manufacture. Again, we have the added weight of the longer crankcase, two throw crank and long cam shaft,

besides the weight of the more complicated transmission.

"We have remaining but one arrangement, that is with the cylinders set at an angle. Here the direction of rotation of the crank corresponds with the length of the machine. Transmission is accomplished either by belt or chain with a minimum of weight and great directness. Practically the only added weight over the single cylinder type is the extra cylinder, piston and connecting rod. The crankshaft is only slightly heavier than for the single and the crankcase weighs about the same. Finally, I firmly believe that with the direction of rotation across the machine the vibration is felt more. I think that the smooth and easy running of the angle twin is due largely to its direction of rotation."

THE SPARKING POINT

CHAS. KAPPLER.—The explosion of the charge should take full effect exactly on dead center no matter what the speed of the motor. As it takes a relatively long time between the instant that the spark occurs and that when the charge explodes the instant of the passing of the spark has to be "advanced" to compensate for this loss of time, and the faster the motor runs, the greater must be the advance. The longer the time taken between the spark-instant, as it is called, and the explosion-instant, the greater must be the "retard" for starting. On a magneto-ignited motor, turn the crank-shaft over until the piston is between $\frac{3}{8}$ and $\frac{11}{16}$ of an inch before reaching upper dead center finishing the compression stroke, with the contact-maker cas-

FRANK

MERRITT

ing in maximum advance position. The contact-points will at that instant be about to separate, and the motor will be timed properly for ignition. The exact distance *before* dead center depends on the motor itself. With a battery machine on the one hand, the piston should be brought to firing dead center with the cam just about to "wipe" the point on the trembler-blade, the distance between the point when it wipes and the point when the motor is on dead center varying between $\frac{1}{4}$ and $\frac{1}{64}$ of an inch, depending on the motor. The less the distance, the greater range of advance obtainable, and the greater the speed of the motor.

A complete work on motorcycle repairs, which includes actual rebuilding of the machine, is probably not yet published, and may never be. We refer you to the *Motorcycle Manual*.

MOTOR WILL NOT RUN FAST.

J. E. DONALDSON.—There are a variety of causes to any or all of which might be due the troubles you mention. We think that wrong carbureter adjustment is responsible for at least a good part. As you do not state the make of motor and carbureter, we can only give general directions for re-setting. Having assured yourself that the slots in the piston rings are not in line and that compression is good by standing on the pedals, place the motor on the stand and screw down the needle-valve. Adjust the tension of the auxiliary air-valve spring by means of its knob or nut until it just seats. Next open the needle-valve about one and one-quarter turns, put in the switch-plug and pedal the motor over. When it fires and runs gradually reduce the opening of the needle-valve and increase the tension on the auxiliary air-valve spring until the motor runs slowly and shows power. It is advisable to remove the exhaust pipe and note the color of the exhaust, the only sure method of determining the proper mixture yet discovered. For slow speed this color will be a *dark blue verging on violet*. When such color is attained the carbureter is set for slow speed. Keeping the spark well advanced, give throttle until a high speed is attained. The blue tone should still be in the exhaust, but it should be lighter as the speed rises. If the carbureter has a high-speed adjustment set this adjustment till the motor runs at the speed desired. If the auxiliary air-valve is not working properly, the color of the mixture will be red, indicating too much gasoline, or yellow, showing too little and there will be a falling off in power. Next start off on the road, running at slow speed and getting the dark blue exhaust color, and then gradually opening the throttle until as high a speed as desired is reached, making the high-speed adjustment as before. Avoid any changes in color away from the blue. Directions which are more specific will be found in the *Motorcycle Manual*, page 23, and it would be well to read page 9 also.

Above all things, use the spark and throttle intelligently. Make all advances and retards gradually; don't "dump" the throttle into the motor. It will only choke it up, you will not start off any sooner and will have trouble later on in getting it to go at all. Take your time in changing pace. The itching desire to jump away quickly puts money in the repairman's pocket as much as any thing that the rider can do to his mount.

A hot crankcase may be due to leakage past the piston rings, the slots being in line. Broken rings will also give the same results. We refer you also to the *Manual* for advice on this subject.

WHAT TO START WITH.

W. F., JR.—Start your motorcycling career with a single, say of five horsepower. You are not "going where the crowd goes" in getting the one-lunger, but as you are going to do the riding and foot the bills, learn on the single. With a tandem attachment you can take a lightweight passenger almost anywhere within reason on Long Island, Eastern New Jersey, and as far up the State as Peekskill. You will, of course, find a number of hills that will necessitate the passenger dismounting, but you need not hunt them out. By gearing down a bit, you can take any grade you meet, riding solo. Of course your speed on the level will be cut down in that case, but as you are not a road-burner by instinct, this will not be of great moment.

A twin machine weighs at least the amount due to the second cylinder with its connecting-rod, piston, and valve gearing more than the single. As to its slow running, the twin, in the hands of most riders, can be run slower than the single. This is due to there being one explosion per revolution of the flywheels instead of only one per *two* revolutions in the single. With some of the new singles, however, as slow a pace as is desired can be had.

Amos Shirley is located at Eighth avenue, near 56th street, New York City. For R-S machines, the agent in New York is the Riverside Motorcycle Garage, 533 West 110th street. F. A. Baker, the Indian agent, is located at Broadway and 75th street.



KNIGHT-BECKET.

ERNEST J. KNIGHT and Miss Agnes Becket, of Aurora, Ill., will be married on January 1. Mr. Knight is well known as the general sales manager of the Aurora Automatic Machinery Company, makers of Thor motorcycles, and Miss Becket is popular in Aurora social circles.

RAILROAD MOTORCYCLE.

D. R. E. DOZIER.—Your inquiry about a light motorcycle car to be run on a standard 4 feet 8½ inch gauge railroad track

brings up the question of a class of vehicles not yet well developed. There are a number of gasoline-motor hand-cars and light inspection cars, but all of them require the services of at least two men to remove them from the rails. Something in the line of a velocipede would be a one-man vehicle, but with the bicycle part fitted with a motor we doubt whether anything as light has been produced. If you will communicate with Fairbanks, Morse & Co., Wabash avenue, Chicago; the Sheffield Velocipede Car Co., Three Rivers, Mich., or the Buda Co., Harvey, Ill., you will perhaps get some idea of the motor-velocipede. Some years ago there used to be an attachment whereby a push bike could run on a standard gauge track; probably one of the firms mentioned will list it or will know of it.

REMOVING RUST.

A. F. K.—Unless it has eaten too deeply into the plating and stock of the spoke, rust can be removed by the use of kerosene or "Three-in-one" oil, applied with a rag. Aggravated cases can be treated with 00-emery cloth, finishing off with an oily rag. A certain amount of the plating comes away with the rust, and this leaves a weak spot, which soon shows rust again. A brother rider has protected his spokes after rust was removed with "Voltite," a solution applied with a wetted rag, and has had pretty fair success with it. Most of the nickel polishes on the market will remove rust. Rust-removers in general contain an acid or other substance which thoroughly removes the oxide, but which also does away with the plating or skin of the spoke. We recommend the rag and kerosene method as the most suitable from all points of view.

FOREIGN LIGHTWEIGHTS.

C. ANUCK.—The lightweight motorcycle is essentially a European machine. The power varies from $1\frac{1}{4}$ to $3\frac{1}{2}$ horse, the latter being made in twin models only in this class. About $2\frac{1}{2}$ h. is the average. The René Gillet machines used in competition were medium weights, and are sold from 10 villa Collet, Paris (14 me.). It is doubtful whether you could get duplicates. The Lourquin-Coudert machines are to be had at 19 rue Planchet, Paris.

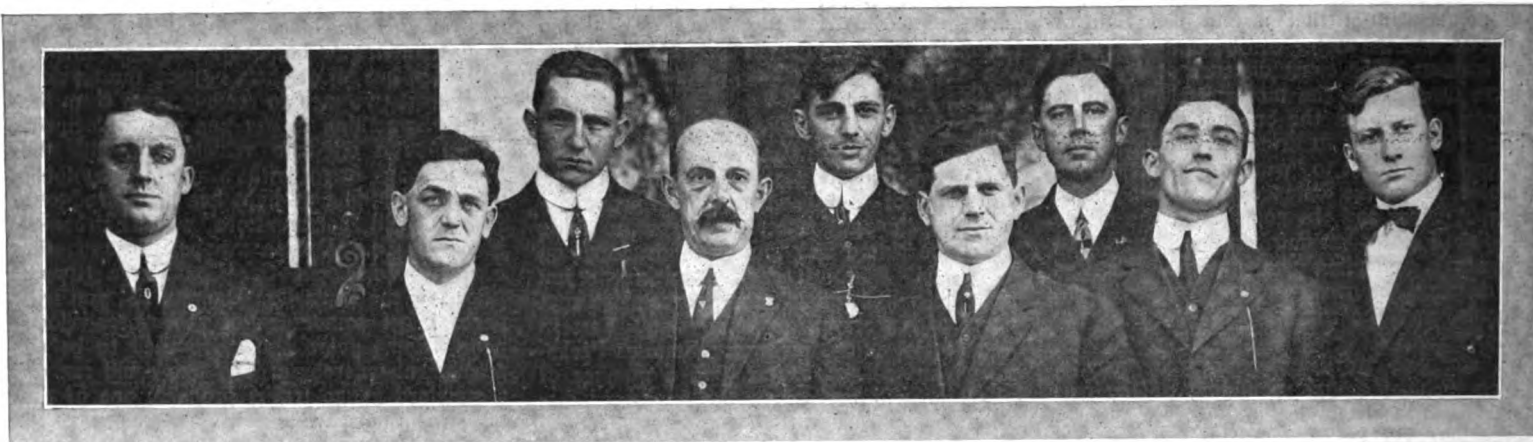
ELECTRIC LIGHTING.

A. MESSMAHL.—The Willard Storage Battery Company's address is Marquette road, Cleveland, O. Write them for further details as to costs, etc. William Hetherington is an electric engineer and is deeply interested in electric lighting for motorcycles. His address is 417 Ridgewood avenue, Brooklyn, N. Y.

STORAGE BATTERIES USED.

H. C. WALTHAM.—See the answers to H. De Lander (Nov. 28 issue) and A. Messmahl, in this issue. Storage batteries are used for electric lighting almost invariably, as there appears to be no satisfactory generator for use on the two-wheeler at present. Dry cells are sometimes used for small lights, but we cannot recommend them.

A SPECIAL racing committee of the Auto-Cycle Union, of England, has just decided that a half mile is not to be considered a distance for recognized record-making. An English rider put in a claim for such a record.



INDIAN FLYING SQUAD.

WHEN the traveling staff of The Hendee Manufacturing Company assembled at the factory for orders for the 1913 campaign, prior to returning to the front, there was organized from it a special corps known as the "Flying Squad," to operate in the

South. With the opening of the new Southern Indian branch at Atlanta, serving the solid South, intensive development of this fertile territory was decided on, and accordingly the forces in the field were massed in Dixie to insure a thorough execution of war plans.

Composing the "Flying Squad" are: F.

L. Hunt, F. D. Shomo, A. Zimmerman, W. J. Teubner, Wilmer Reichert and H. M. Seibold. All available members of this corps were conscripted for the accompanying photograph of a portion of the sales organization after a convention session at the factory.

HELPING THE DEALER.

FOLLOWING up its lively campaign to assist motorcycle dealers throughout the country, the National Motorcycle Dealers' Information Bureau, with headquarters at Indianapolis, is sending out a number of sprightly circulars and other helpful literature. One attractive folder is headed "Five Ways to Make a Noise." It calls the dealer's attention to the value of display advertising, of reading notices in local newspapers, of window displays, of systematic circularizing by mail, and of persistently "talking motorcycles." There is something of value for every dealer—the beginner as well as the veteran—in the latest batch of rapid-fire suggestions from the Information Bureau, and the material will be forwarded promptly upon receipt of a postal.

AJAX-GRIEB ADDITION

WILLIAM R. GRIEB, president of the Ajax-Grieb Rubber Company, Trenton, N. J., believes the new addition to the plant, consisting of a three-story building, which will increase the company's manufacturing capacity by 36,000 square feet, will be ready at the end of this month, and will enable full advantage to be taken of the extraordinary demand for the firm's products. The additional plant has been rendered necessary by the fact that although Ajax business increased 15 per cent. this year as against 1911, despite a reduction in price units of approximately 25 per cent., the company was quite unable to cope with the demand for pneumatic tires. The factory has been going 24 hours per day since February, 1911, is still doing so, and seemingly will go on with day and night shifts indefinitely.

MORE TERRITORY.

PUTNAM COUNTY, N. Y., has been added to the territory of the Ford Motorcycle & Auto Supply Company, of White Plains, N. Y. Last year the company sold the Excelsior in Westchester County only.

ANNOUNCEMENT is made of the resignation of R. M. Hawkins, assistant purchasing agent of the Standard Welding Company, of Cleveland.

CONTINENTAL WARNING.

NOTICE has been served on all tire manufacturers by the Continental Rubber Works that steps will be taken to prosecute firms failing to respect its trade-mark, made up of knurling or indentations, in the form of zig-zag lines, that have served as a distinguishing mark on Continental tires for years past. When the company entered upon the manufacture of its first bicycle tires the mark was adopted, and an application was made to have it registered as a trade-mark on May 4, 1911. The Patent Office registered the mark on December 3 last, and the Continental company is now in a position to take action against other manufacturers who may continue to use the mark on their tires.



YALE SQUAD DIVIDED.

SO successful was the work of the Yale "Flying Squad" in Ohio, that the riders are to continue their work in other territory and one detachment, headed by Harry Capron, has left Toledo on an eastern invasion. They will cover New York State first and then move north through the New England section. The photo shows a Yale demonstration stunt.

CAMPBELL BRANCHES.

ANNOUNCEMENT is made by G. W. Campbell & Co., of Waterloo, Iowa, that they will within the next few weeks open branches in Charles City, New Hampton and Vinton, Iowa. Guy Campbell, president and general manager of the company, has just obtained a lease on a large store in Charles City and expects to have it open for business by January 1. Fred Campbell, who has been in the employ of the company for some time, will have charge of the new branch, which will control Butler, Michael and Floyd Counties, and portions of Chickasaw and Cerro Gordo. The Campbell company handles a general line of sporting goods and is agent for Indian motorcycles. It disposed of three hundred machines last year and has booked orders for 500 thus far for the new season.

BAKER EXPANSION.

F. A. BAKER & CO., 10 Warren street, New York City, for ten years distributors of Indian motorcycles in Greater New York, is making preparations for a big expansion for 1913, and with this in view a new uptown branch will be opened January 1, at 208-210-212 West Seventy-fifth street, near Broadway. The uptown branch will be equipped with a complete repair shop, in charge of a competent mechanic.

A special offer of free motorcycle storage will be made to residents of New York City purchasing new 1913 models. Indian motorcycles only will be sold.

There will also be a general garage business for the accommodation of motorcycle tourists visiting New York. A full line of Indian parts, motorcycle accessories, clothing, etc., will be carried in stock, both at the uptown and downtown stores. The Indian agency in Brooklyn, controlled by A. H. Patterson, is located at 1080-82 Bedford avenue, will be similarly equipped to the New York store. The downtown store at 10 Warren street will have general supervision and will be the main distributing headquarters.

Dr. T. J. Foster, a veterinary surgeon at Monticello, Ind., uses a motorcycle in responding to calls.

TIPS *And* TOPICS



BIG twins will be featured for 1913," say quite a few makers and garage-men. They intimate that the 8-10 h. twin will no longer be looked upon as a speed-monster, and that we may expect to see "Dad" taking out three of his girls in a special sidecar fitted to carry the extra passengers. The writer sometimes wonders how much power we are eventually going to find in twins. Are we going to travel along the lines of the automobilists, who not so many years ago considered that a runabout should be fitted with a 50 h. motor, or is it going to be a case of 14-16 h. twins for solo work in the near future? The motorcycle industry has followed the course taken by the automobile trade very closely since it first assumed respectable proportions, and it may emulate the "big car" craze of 1907-10 with a "monster-twin" mania in 1914. Let us hope not, for the sake of the hospital statistics, if not for the good of the sport.

Twins and Twins.

SPEAKING of big twins, we all hear of poor roads in the West and of how riders of 7 h. mounts have had great trouble negotiating them. I have ridden both singles and twins myself, but the experiences of a friend, just returned from the Rand in South Africa, throws new light on the twin (and horsepower) question. Just before leaving for London he took a holiday trip of 375 miles across the veldt, and rode over only 67 miles of "road" during the entire distance. The remainder was foot-tracks, prairie and fords, with an occasional descent to cross a *sluit* (arroyo or deep gully). He had some photographs taken on the trip, showing the country crossed; one of these was a ford where three husky natives were carrying him and his bus over four feet of water. When I told him about the gumbo here he smiled, and concerning the big twins his remark was: "Fancy carrying 300 pounds across a *sluit*." He told me in confidence that a 4 h. single for such work was out of the question, being too bulky for use on the velt, and that the best all-around mount was a 2¾-twin, with foot-rests, the type that he had made the 375-mile trip on. And this in a country where our wallows would be considered wagon roads, and where 13 inches clearance on automobiles is desirable for fear the fly-wheel will smash on a rock. In one or two of my friend's pictures, the mud was up to the foot-rests and resembled our own precious gumbo in consistency.

THE twin mentioned has been pretty often described by "Britisher" and has its cylinders opposed horizontally, the bore

and stroke being 2.36 inches each. One wrinkle in construction worth copying is a pressed-steel outside flywheel and the motor gives one explosion every revolution at equal intervals. It has a peculiar oiling device, a combination of hand and pressure feed to the crankcase. When the rider pulls the pump plunger up, oil is taken into the barrel from the tank, and a spring then forces the plunger down, the oil going through a sight-feed device by means of which its flow is regulated. I like this idea better than the gravity drip arrangement, but do not think it is anywhere near as desirable as the apparatus I looked over on an old 3 h. single bike the other day.

Novel Oiling System.

WHAT first attracted my notice was a triangular well in the bottom of the crankcase. Next I saw three leads, one to the rear wall of the cylinder and the others to the pulley and valve sides. There was a mechanical pump and also a hand-pump on the tank, and a pipe from the latter to a three-way connection attached to the leads. The owner showed me that there were three oiling systems in one on his 'bus. In the first, the mechanical pump fed oil through the leads, and this oil passed through channels in the shafts, whence it dripped back into the triangular well where a siphon tube drew it out at intervals and sent it over the chain. Should the mechanical pump go bad, all that was necessary was to open a cock and use the hand pump at regular intervals. This was the second system. The hand-pump was also used for such speed work as the rider did when the mechanical pump did not flow enough oil. Both of these systems did not recirculate the oil, but after it was used in the bearings applied it to the chain, and there was no splash. The third system was by splash, the crankcase being filled to the proper height through a breather which was plugged when the siphon tube was used, while the latter tube in this system is plugged and the breather left open. This is the emergency system, and so far has not been used by the rider except when he first bought the bus. Some such arrangement as his ought to be on every motorcycle pretty soon.

Circulation Oiling.

I WAS talking about this system with a rider shortly before the Editor let out a howl for my manuscript, and he seemed to think the circulation system is better. (He rides a machine with this system of lubrication.) I think most of us know how the circulation apparatus works, but not very many have examined the oil after it

has gone the rounds a few times. To cut a long story short, I worked some oil out of his crankcase and after distilling it, showed him some chips and fine powder which remained. Part of this was aluminum, part bronze and some cast iron; all came out of the oil. You can imagine these little chips rubbing on the bearings as the pump passed them through the gutters again and again. No gauze screen is of fine enough mesh to catch all of these particles of metal. This same thing will happen with the systems described in the last instalment of "Britisher's" Notes, the Enfield and W. & D.

Increased Brilliancy.

NOW and then someone announces that if you add this or that to the water in your generator, there will be an increased brilliancy of light, and the generator will not freeze in cold weather. Judging from some of the substances used in the metropolis recently I conclude that Nihilist publications were the authorities from which the information was derived. So long as hydrogen-peroxide was employed in a very weak solution, about 1:25 to 1:50 increased brilliancy and a lower freezing point was obtained with moderate safety, but experiences like the following show that a little knowledge is often dangerous.

In company with a brother rider I was approaching a motorcycle garage when we were hailed to enter and be witnesses of a new mixture for winter use in the generator. We entered and stood at a respectful distance from the experiment. On turning on the "water," the top of the generator opened like a lily and there was a rain of acidulated water and carbide burning with a copper flame. Prompt and liberal use of a chemical extinguisher subdued the conflagration, and on questioning the seeker after new mixtures while applying oil to his burns, we were startled to learn that he had employed the base of a very potent high-explosive for the solution; one that detonates on pressure. He had read about it in a book. A ten-acre lot with a coroner in attendance is recommended as most suitable for these demonstrations; personally we think it advisable to stick to alcohol as a non-freezing solution where human life is precious.

A Criticism.

"TIPSTER" in the last issue seemed to take exception to what was a rather harmless arrangement of motorcycle driven from the sidecar, describing it with a delightful alliterative phrase in which "m" figured prominently. Well, to the rider of a fat-cylindere bus, driving from the sidecar must seem somewhat soft, but it should

be remembered that from such individual arrangements of control and other things in the past came the standard practice of the present, and so it goes always. Not that driving from the sidecar seat is likely to influence the design of motorcycles decidedly in the near future, but it might, indirectly. At present, any motorcycle is rather difficult to make accurate tests on, being a one-man outfit. When a sidecar is fitted two men are needed; one to drive and the other to make the tests. There is too much of a chance of misunderstanding in the latter case, but if one man can sit down alongside the machine and observe it while controlling it a lot more will be known about air-cooled motors. Then there is the case of the man who is incapacitated from riding but who can drive a sidecar outfit; he ought to be considered in the economy of things as well as the highway incinerator. So the desired arrangement might be of some use after all.

Cocked Saddles.

PROBABLY some of you readers will notice that you occasionally cannot ride for the usual length of time without feeling a strain more on one side than on the other. This is often due to the saddle shifting out of level to one side, usually the right, as many riders have a tendency to throw the left leg over to the right to ease themselves. It is an easy matter to glance at the saddle before starting out and note whether it is level or not. Those who have ridden push bikes seem to do this unconsciously before dropping into the motorcycle seat. Around the big cities, cocked saddles are very noticeable, it being rather difficult to get at the clamp bolts, especially with a big wrench, the "boulevardiers" stock tool. It is just about this time of year that the saddle tops are bulged out of shape from careless sitting. If you are getting a 1913 model it may not make so much difference, unless the saddle turns down and dumps you before the new bus arrives.

Care of Lamp Burner

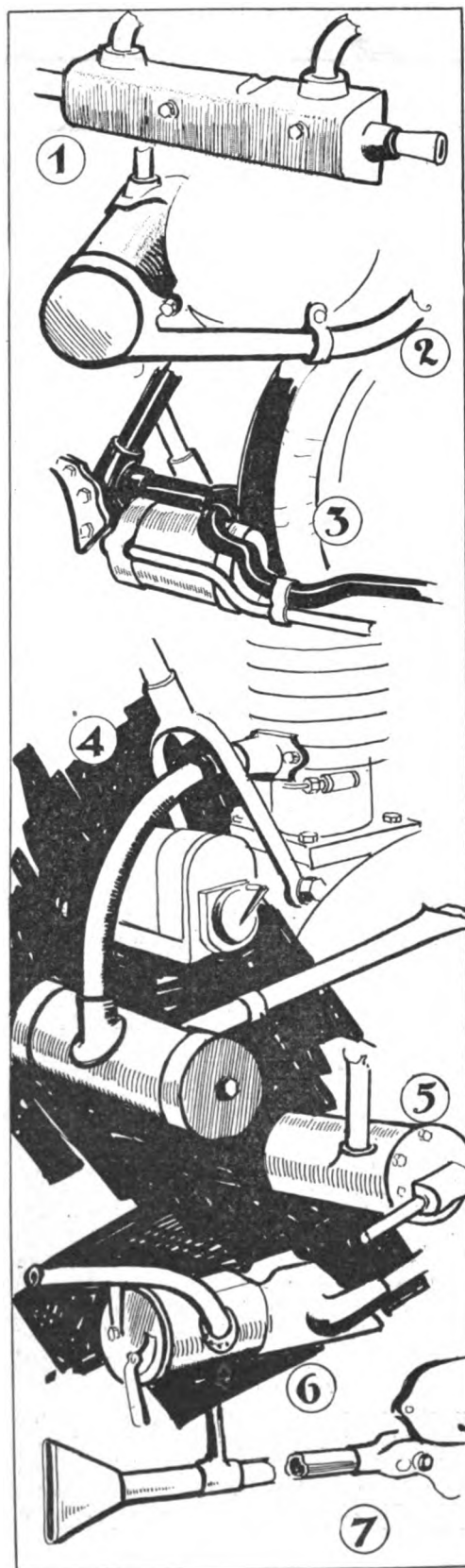
IF your gas is supplied by generator, never let the light go out gradually after the water flow is shut off. A dying acetylene flame carries much soot, which will be deposited in the burner until the tiny holes are completely plugged. Exactly the same thing will happen if you leave the gas from your tank turned very low; for example, when the machine is standing outside waiting for you to finish your call on the young lady. If the flame is kept up to moderate brightness, no soot will form, or at least, not enough to cause trouble.

Should your burner become plugged, the only remedy is to fit a new one or clean the old one, and as cleaning is rather a difficult task in the dark, a prudent rider will carry an extra burner in his kit, thus being ready for the emergency when it arises. The tips are rather brittle, so be careful when screwing one home that you do not wreck it. A coating of white lead or shellac on the threads will prevent any leakage of gas, or even a few turns of soft string before the burner is screwed down tight will often do the trick. Your repair kit should also include a few inches of fine stiff wire, small enough to be pushed through the burner's tiny holes, for cleaning out any particles lodged there. Another good way to clean a burner is to attach it to a pump and force out the obstacle by air pressure.

MUFFLER DESIGNS

BELOW are shown seven designs of silencers found on motorcycles at the recent English Show in Olympia.

(1) Novel silencer on Quadrant twin. (2) B. S. A. muffler system. (3) Silencer and long exhaust pipe on the W. D. (4) Shown on the Levis two-stroke. (5) The Corah design. (6) The Indian muffler, showing cut-out. (7) Triumph's long exhaust pipe with spatulate end.



AN INDIAN POW-WOW.

AN INDIAN pow-wow was conducted recently by the Wisconsin Motorcycle Company, of Milwaukee, by way of celebrating the arrival of the 1913 Indian models. The affair, which included an excellent musical program and an exhibition of articles used by the original red men, such as Indian pottery, war clubs, decorated blankets and scalping knives, was held in the company's salesroom and was well patronized by local motorcyclists.

BOSCH AGENCIES.

FOUR new Bosch agencies are announced as follows: Dallas A. Shafer & Co., 106 North Eighth street, Richmond, Va.; Fry & McGill Motor Supply Company, Denver, Colo.; Pence Automobile Company, 800 Hennepin avenue, Minneapolis, Minn., and the Johnson-Gewinner Company, of 124 Peachtree street, Atlanta, Ga.

ON THE MERKEL LIST

AMONG the agencies recently placed by the Miami Cycle & Mfg. Co., are a number over the Canadian line, as follows: The Dominion Cycle Co., of Winnipeg, Man., renewed its contract and ordered a carload of machines; the contract of the Western Cycle & Motor Co., of Regina, Sask., was also renewed, and Walter Andrews, of Toronto, was signed up as a new representative. He will handle the Flying Merkel line throughout the Province of Ontario. F. L. Valiant, assistant manager of sales at the Miami factory, dropped in at Toronto on a flying trip and closed the deal. Joe Bourne will continue to retail the Merkel in Toronto.

NEW LOCK PRICES.

THE Sabo Manufacturing Company, of Cleveland, O., which recently patented and put on the market the Sabo Motorcycle Lock, has found it necessary to revise its working basis. The cost of manufacturing and advertising the article permitted of no profit at the old rate of \$1. After a careful study of the situation they have appointed the Aermore Manufacturing Company, of Chicago, as sole distributor for their product, and they will devote their entire attention to the manufacturing. The revised prices will be forwarded upon application to the Aermore company, 1536 Michigan boulevard, Chicago.

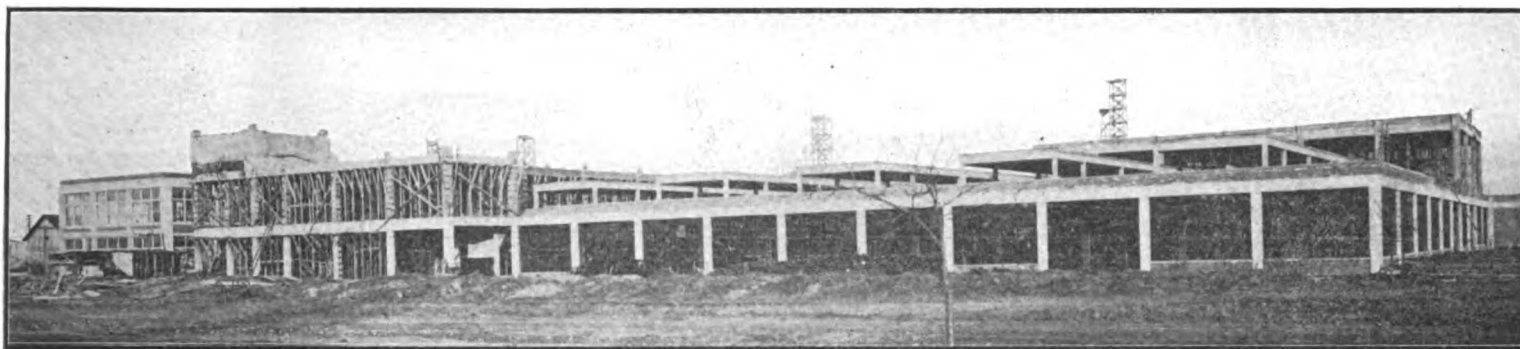
A NEW ENGLAND DEALER.

H. K. AUSTIN, Eagle agent at Reading, Mass., is one of the New England live wires. Mr. Austin has handled the American Motor company's products for the last six years with great success, and reports the outlook for the coming season far in advance of last year. Mr. Austin is also the manufacturer of the Austin frame pump for bicycles and motorcycles, and does a large business in this line. An order for 5,000 of these pumps has just been placed with him by the American Motor Company.

PHAY SAVED MONEY

L. PHAY, a motorcyclist of Cedar Rapids, Ia., has been riding a Yale single since the summer of 1910, and in the three seasons has covered 25,000 miles. He states that in running up this mileage his total outlay on the machine, aside from gasoline and oil, was \$2.30.

HARRY BEHREND, of Huntington, W. Va., has been appointed State Commissioner by President Patterson.



HALF MILLION DOLLAR PREST-O PLANT

THAT the Prest-O-Lite Company, of Indianapolis, is building a new factory, costing over half a million dollars, and with four times the capacity of the present plant, is ample evidence that the company has strong faith in the continued growth of the gas tank business. Appropriately enough, the new plant stands just across the road from the Indianapolis Motor Speedway, in the construction of which Carl G. Fisher and James A. Allison, president and secretary of the Prest-O-Lite Company, played such important parts.

The new factory is about five miles from the center of the city of Indianapolis,

Ten Buildings Are Under Construction by Prest-O-Lite Company Near Motor Speedway on Out- skirts of Indianapolis.

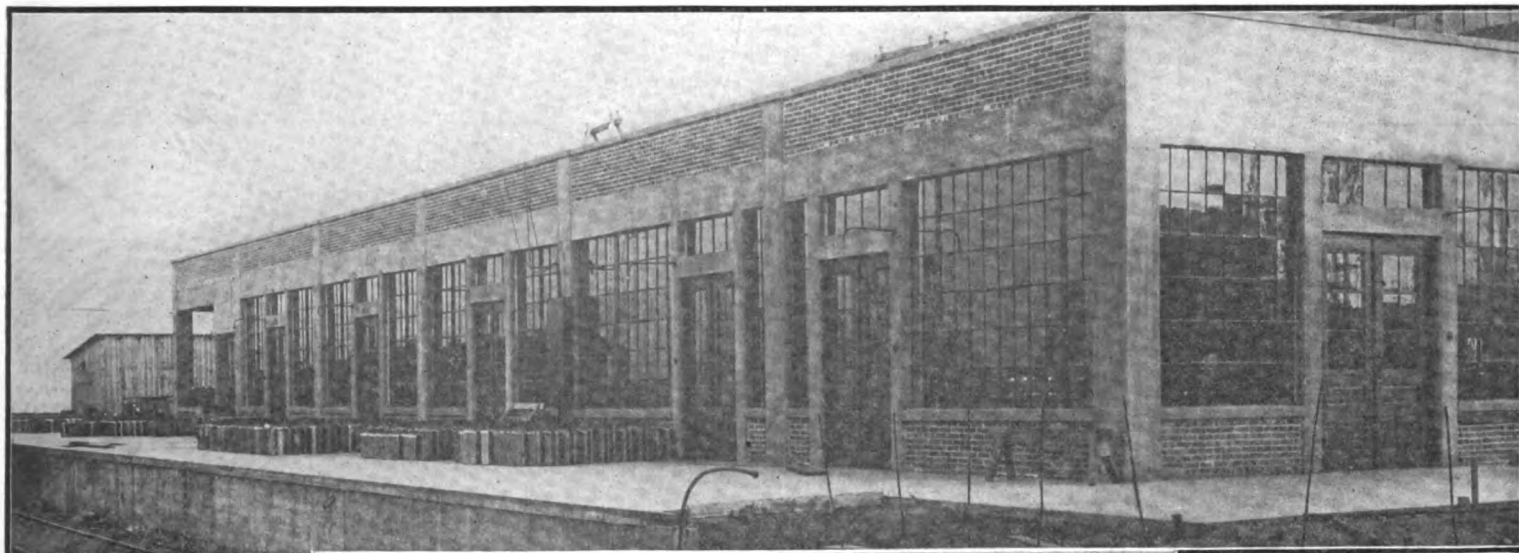
quarters of an acre floor space; and a model garage for the use of the company's employees; engine and boiler house, and four warehouses constitute the rest of the new Prest-O-Lite plant.

Construction work was begun six months ago, and the company hopes to be in its new quarters by the first of March. A part of the factory, indeed, is already in use. The gen-

erator and charging plants have been running since the middle of October. The other buildings are more than half finished.

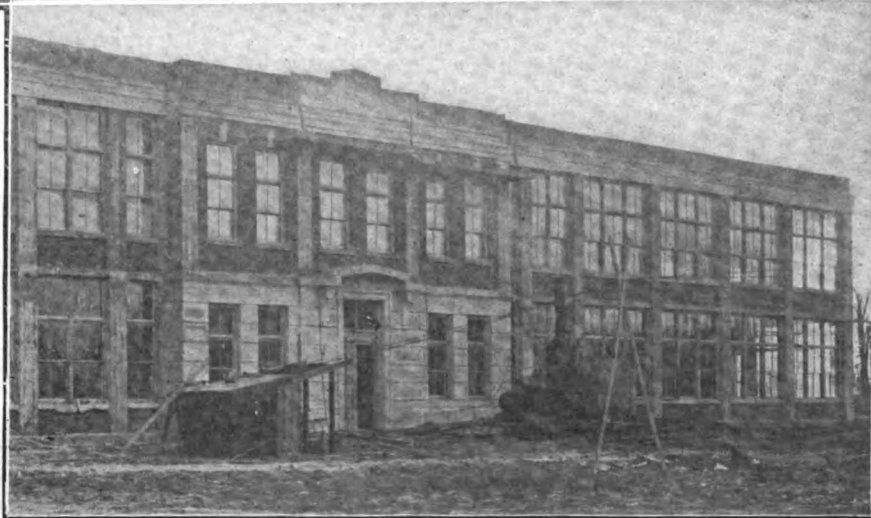
Every step in the manufacture of a gas tank will be carried on at the new plant. Manufacturing processes that have been scattered over the city of Indianapolis, and even in other cities, will here be gathered together.

The whole factory has been planned so as to permit the utmost economy of time and labor in handling the product. The sheet steel comes in at one end of the plant, and comes out in finished tanks at the other. No effort or expense has been spared to make the



and is the first of a colony of automobile and accessory factories which, it is planned, shall constitute a "Horseless City" near the famous speedway.

There are ten buildings in the Prest-O-Lite group, occupying fifteen acres of ground. The main factory building, 300 feet by 400, occupies an area nearly equal to a city block. A charging plant (one of sixteen such plants scattered throughout the United States and Canada); a generator house, where the acetylene gas is produced; a big gas-holder of 25,000 cubic feet capacity for storing the gas; a spacious office building having three-



working conditions in factory and office ideal. Liberal use of windows and skylights provides good light and ventilation.

Already plans are under way for the accommodation of employees and their families near the factory. Two railroads, a traction line and an excellent stone boulevard furnish transportation into Indianapolis.

Ten years ago The Prest-O-Lite Company began business in a little concrete block building about twenty feet square. This summer a Canadian factory was opened, and two Canadian branches were installed. The first little Prest-O-Lite factory building is still standing in Indianapolis.

Top of Page, Side View of Office and Factory; Center, Part of Charging Plant; Bottom, View of Entrance to Office.

NEW BUCK CAPITAL.

A NNOUNCEMENT is made by the Buck Sales Co., of St. Louis, Mo., manufacturers of the Simplex sight oil gauge, that H. G. Reid, a St. Louis capitalist, has taken an interest in the company and will hereafter look after the firm's business in foreign territory. Mr. Reid will leave for an extended European trip early in January, and will also visit Australia.

Among the new accessories that the Buck Sales Co., is placing on the market are a new magneto cut-out and a carburetor control, the latter being a device which gives a correct mixture at all speeds. The control is sold under the trade name of the "Auto-Thermos."

NEW MERKELITES

G. W. BROWN, of Denver, Colo., formerly agent for the Flying Merkel, has sold his motorcycle business to O. F. T. Daenitz. Mr. Daenitz has contracted for a carload of Merkels. Other new Merkel agencies are given as follows: W. A. Buff, Pontiso, Ill.; Spahr Brothers, Canal Dover, Ohio; Falls Garage Company, Chargin Falls, Ohio; R. W. Thompson, Tidioute, Pa.; W. B. Apple, Walkerton, Ind.; C. T. Ranere, Hammonton, N. J., and H. E. Linde, Seneca Falls, N. Y.

HIPPO-FRENCHO SALE

HOWARD A. FRENCH & COMPANY, of Baltimore and Washington, have bought out the interests of the Hippo-Frencho Company, manufacturers of the Hippo-Frencho Indian free engine clip, Hippo-Frencho quick detachable Presto tank brackets and the Hippo-Frencho foot rests. In the future these products will be sold by H. A. French & Company, under the name of "Hafco."

L H. MESKER, manager of the St. Louis branch of Manning, Maxwell & Moore, Inc., has resigned his position and will be connected after January 1 with The Ferro Machine & Foundry Co., of Cleveland, Ohio.

**THE CANADIAN WIGWAM.**

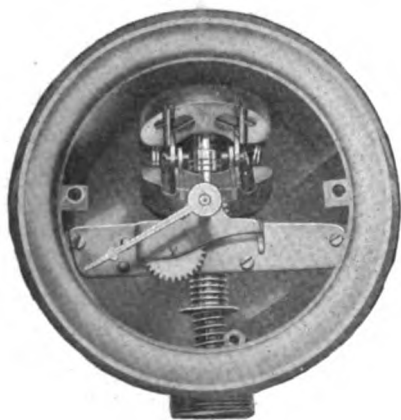
ONE of the most important advances made of late by the Hendee Mfg. Co., is the establishment of a Canadian branch in Toronto, Ont. This up-to-date headquarters will handle all the firm's business in the Dominion, and will afford Canadian riders the highly efficient service which patrons of the company throughout the States have come to expect. The new branch, situated at 12-14 Mercer street, is in a four-

story brick structure, so equipped that all branches of work will be facilitated to the utmost.

Edward Buffum, of the sales department at the Springfield factory, has been appointed general manager of the Canadian branch. As a pioneer of the motorcycle industry, possessing a keen insight into the requirements of the trade and riders in general, Mr. Buffum is admirably fitted for blazing new Hendee trails in Dominion territory.

Fitting Improved Corbin-Brown Speedometer

IN addition to showing exceptional strength and simplicity of mechanism the Corbin-



Corbin-Brown Speedometer, Stripped to Show Internal Mechanism.

Brown speedometer for motorcycles, made and marketed by the Corbin Screw Corporation Division, American Hardware Corporation, of New Britain, Conn., possesses another desirable feature. It is calibrated up to 80 miles and can be attached to either the front or rear wheel of the motorcycle without disturbing the wheel adjustment of the machine.

One of the accompanying illustrations shows the front wheel attachment. Absolutely positive recording is assured by the perfect interlocking of the driving sprocket and gear. The large driving sprocket is made in one piece and bolted to outside of spokes with secure clamps. The spring fork is compensated for by a special bracket.

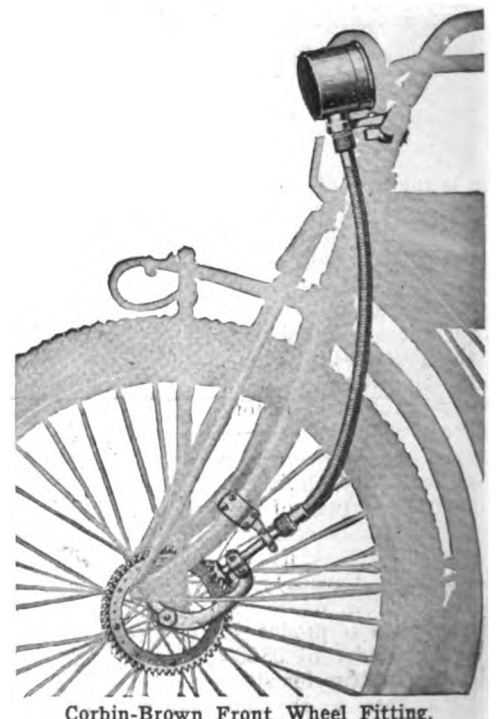
The rear driving attachment is so constructed that the speedometer may be instantly disengaged from the driving sprocket. A slight pull of the cable does it. As a result there need be no recording of mileage while the motor is being tuned up on the stand. The driving sprocket is made in two parts so that it may be slipped into place easily. The Corbin-Brown folks are prepared to fit their instrument to all standard makes of motorcycles, with either front or rear wheel driving.

A LOOPED MUFFLER PIPE.

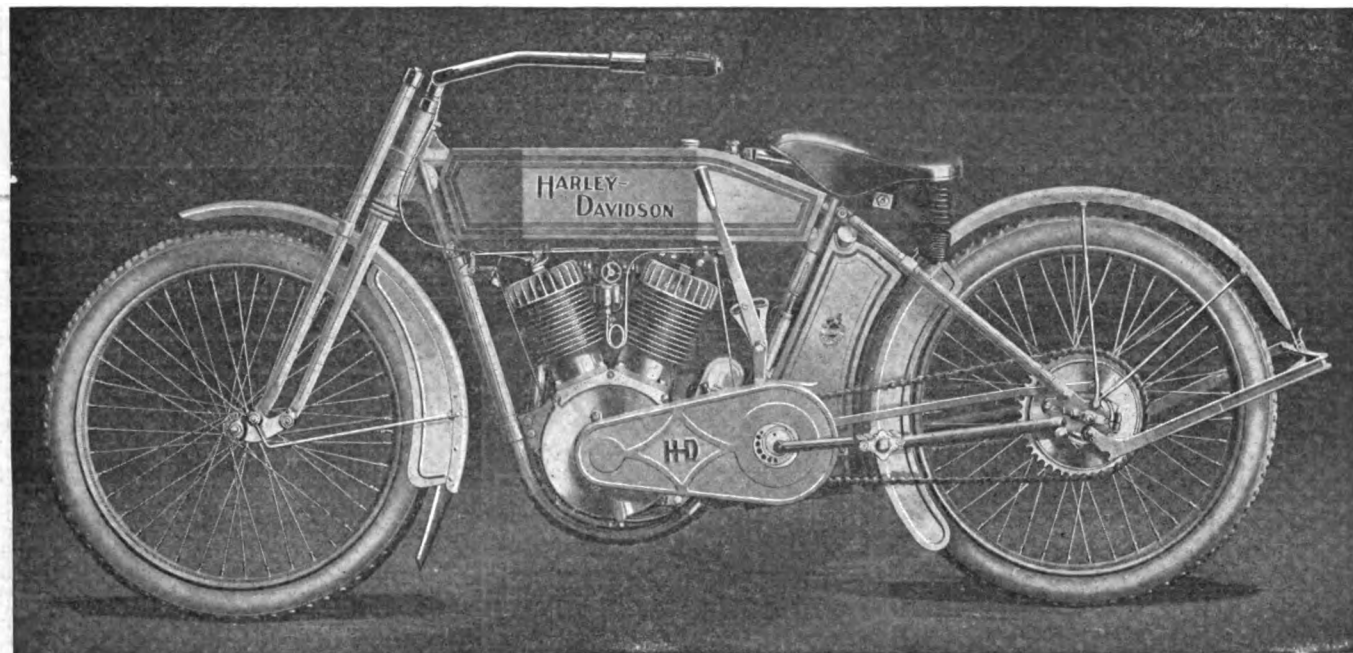
A FOREIGN exchange illustrates a muffler pipe of flexible metallic tubing which makes six fairly large loops, under and slightly forward of the motor, before leading to the rear. It is credited with an unusual cooling effect upon the exhaust gases.

Members of the Bay City M. C. recently moved to their new club rooms on Fifth avenue.

R. E. ULLMAN, of Ironton, Ohio, reports the loss of his 1911, 7 h. Indian. The frame was red with blue motorbase and the motor number was 73 C 099.



Corbin-Brown Front Wheel Fitting.



68 Miles an Hour

FRANK LIGHTNER'S stock 8 H.P. Harley-Davidson twin attained a speed of 68 miles per hour in the Bakersfield road race held at Bakersfield, California, Thanksgiving Day. P. C. Taylor's single cylinder Harley-Davidson won the single class, finishing 49 seconds ahead of James Dupes on another Harley-Davidson, and over an hour ahead of the nearest machine of another make.

Harley-Davidsons are not racing machines, but because they are designed right and built right they will outrun any other stock machine of equal horsepower or equal piston displacement.

The 1913 Harley-Davidson twin is the fastest stock motorcycle built, barring none, and to our knowledge has not been defeated in any contest which it has entered to date.

Harley-Davidson Motor Company

Producers of High-Grade Motorcycles for Eleven Years

333 C Street

Milwaukee, Wisconsin

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One time, three cents a word; twice, two cents a word each insertion. Agents' cards, five cents per word; two or more times, three cents per word each insertion. No advertisement for less than fifty cents.

FOR SALE OR EXCHANGE

FOR SALE.—One 8 h. twin M. & M. motorcycle with a brand new side car; \$125. H. Kaskel, Spencerville, O.

FOR SALE.—New 1912 Indian, \$200; perfect. Has been used only a few days; 7 twin. W. H. Morgan, New Kensington, Pa.

FOR SALE.—1912 twin Indian, 7 h.; blue; fully equipped. Ridden only 500 miles. Fully guaranteed; \$190. James F. Cox & Sons, 508 State St., New Haven, Conn.

THOR TWIN FOR SALE CHEAP.—Chain drive, battery ignition, 1908 model; recently overhauled. All new parts where needed. Apply quick for further details. Send deposit to clinch order, which will be promptly returned if sold. American Motor Company, 716 Center St., Brockton, Mass.

FOR SALE.—1912 7 h., two-speed, T. T. model Indian, in perfect condition; run 1,500 miles; new rear tire; tandem luggage carrier, exhaust whistle; a bargain at \$225. W. N. Raach, 165 Diamond street, Ravenna, Ohio.

WILL CONSIDER the sale or exchange of typewriter (visible), valuable collection of stamps, electric fan, acetylene projectorscope and several very old books; value \$175 or more, for late model magneto motorcycle, clutch preferred. No junk given or wanted. Address "Motor," Mountville, Virginia.

FOR SALE.—Late model 1912 Red Indian twin, A-1 condition; tandem and extras. Bargain at \$200. L. Darby, Belvidere, Ill.

FOR SALE.—1912 Excelsior 4 h., used 200 miles; chain drive, Bosch magneto, Eclipse clutch, horn, self-lighting lamp, luggage carrier with foot rests. Write if you want a bargain; \$175 cash. Herbert Hoefer, Higginsville, Mo.; R. I. Box 6.

FOR SALE.—1912 four-cylinder Pierce motorcycle; fully equipped. F. H. Wilcox, Greenfield, Mass.

FOR SALE.—1910 loop frame 5 h. twin-cylinder Indian; new tires, Bosch magneto; \$85 cash. Eblen, 25 Whitehall Terrace, Atlanta, Ga.

STOLEN.—1913 twin Excelsior, 7 h., fully equipped. Engine number 38485, Georgia license number 17896. W. S. Farnsworth, Atlanta Georgian, Atlanta, Ga.

THROUGH the sudden death of my uncle I have in my possession a new up-to-date Smith Premier typewriter valued at \$110, for which I have no use. Have just unpacked and find it in excellent condition. Will exchange this typewriter, together with a 4 h. gasoline engine, for a 1912 twin motorcycle. Address Pinney A. Currey, Baker, Oregon.

WOULD like to exchange a 1912 Majestic Sidecar, almost new, last used on a 1912 Excelsior, for Auto body suitable for Maxwell Messenger Car, two-passenger. A. A. Jordan, 279 Lumpkin street, Athens, Ga.

FOR SALE.—1912 Thor 7 h. Blue, run 1,200 miles, fitted with all steel sidecar. Simplex, speedometer, Prest-O-Lite tank, lamp, Purdy whistle, carrier and tail lamp. In new condition except tires, no punctures. Very fast, powerful machine. Am buying auto. Will sell complete for \$325, cost \$410. Will sell machine or sidecar separately. H. S. Rothera, Meadowsweet, Peekskill, N. Y.

RARE BARGAIN.—1912 Pierce, 4 cylinders, with all accessories. Practically brand new, in perfect condition. Will sell cheap for cash. H. C. Wing, Greenfield, Mass.

FOR SALE.—1911 M.-M. motorcycle, magneto model, good condition. \$65. Bargain. A. Camblos, 5109 Warrington avenue, Philadelphia, Pa.

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FOR SALE.—An early 1913 model 7 h., belt-driven Excelsior with new style tank. Run only 25 miles for demonstrating. Guaranteed in perfect condition. Do not want to carry through the winter. Will ship upon deposit of \$15, with privilege of examination. Positively lowest price \$203. Also two \$20 Standard speedometers, 80 mile dial, for \$12.50 each. Address EXCH, care MOTORCYCLE ILLUSTRATED.

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Motorcycle and bicycle agencies can make big money during dull season selling our gasoline lighting systems for stores, houses, streets, etc. Write for free catalogue. **DOUD LIGHTING CO.** 187 No. Sangamon street, Chicago, Ill.

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THE magazine to read if you want to keep up to date on wireless and progress in electricity. With one year's subscription to Modern Electrics for a limited time only we are making the following:—



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15c per Copy (Act quickly as our supply of the above is limited.) \$1.50 per Year

MISCELLANEOUS

\$5 REWARD for information as to whereabouts of one Fred W. Beltner and of Harley-Davidson motorcycle, No. 2358B, which he was riding when last seen in Bridgeport, Conn. Waldorf Motor & Machine Co., 135 Cannon St., Bridgeport, Conn.

AMERICAN resident in England is open to ride for an American firm in all competitions in Great Britain during 1913; seven years' experience with motorcycles in Great Britain. For further particulars apply S. R., MOTORCYCLE ILLUSTRATED.

POSITION WANTED by an A1 bookkeeper and traffic man. Ten years' experience with all kinds of office work. Familiar with motorcycle business. Write for more information. C. R. B., c/o MOTORCYCLE ILLUSTRATED.

DEALER'S CARDS, Etc.

BARGAINS.—New \$225 and \$200 now at \$195 and \$165; demonstrator 6 h. twin, \$185; one 4 h., \$145, \$125, \$120; one R. S. rebuilt, \$75; one Merkel Light, new, \$90, 2 1/2 h. Mayo, The Motorcycle Man, 222 Penn street, Reading, Pa.

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Distributor for READING-STANDARD and Agent for EAGLE MOTORCYCLES. 1913 MODELS IN STOCK. A Large Number of Used Machines at Bargain Prices. Complete Machine Shop. All Repairs and Supplies. 533 West 110th St., near Broadway, New York. Tel. 5615 Morningside.

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B. & C. TWO-SPEED and free engine gears for chain-driven motorcycles of the counter-shaft type. Bushnell & Cannon, 1268 East 80th street, Cleveland, Ohio.

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PARTS in stock for F.-N., Curtiss, Royal Pioneer, Indian, Thor, Marsh, Griffon and others, and sundries. Tiger Cycle and Aeroplane Co., 782 Eighth avenue, New York.

THE NEW YORK Motorcycle Co., 782 8th avenue, New York City. Distributors of Thor motorcycles and parts. We have the only supply of parts in America for F.-N. and Royal Pioneer motorcycles. We also carry a big stock of parts for Indian, Curtiss, M.-M., N. S. U. and R.-S. We have at all times over 50 used machines at all prices. We repair broken cylinders, pistons and crank cases. We have the largest and best equipped motorcycle garage in the country and we do reliable repairing.

HAVE YOUR motorcycle overhauled now; expert work, moderate charges; ten years' experience in motorcycle repair work. Parts for N. S. U., Indian and Peugeot. Metropolitan Motorcycle Repair Co., 320 Amsterdam avenue, cor. 75th street, New York.

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Do you slowly creep along—seeing a few feet ahead of you, by means of a feeble oil lamp or small carbide generator—or do you ride along at a good speed with a flood of Prest-O-Lite brilliancy telling you of coming ruts and puddles IN PLENTY OF TIME to avoid them?

The pleasure of night riding is made possible ONLY by Prest-O-Lite—the practical light for motorcycles.

Turn on just like a gas jet and touch a match. Convenient, clean, dependable. Nothing to freeze in cold weather.

Gives you a steady flood of bright light that neither flares up or dies down. Insure yourself and your mount against accidents. It is, in every way, the only economical kind of light.

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Exchange service practically everywhere has been provided for you through our 20,000 dealers (automobile and motorcycle).

NOT AT ALL Expensive

Any rider who has used Prest-O-Lite will tell you that the operating expense of it is no greater than the cost of the carbide a generator consumes.

The first cost, \$10, does not represent money spent, but INVESTED, because the genuine Prest-O-Lite is always in demand and is always salable for about its first cost.

Therefore you can easily afford it—in fact, you cannot afford to be without this combined Convenience, Pleasure and Insurance. One accident due to poor light may cost you more than years of Prest-O-Lite service.

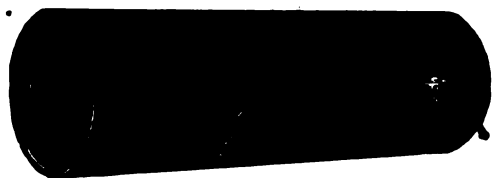
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Louis F. Bradburn, 45 Chapel Street, Canandaigua, N. Y., agent for the Harley-Davidson in his locality, finds Prest-O-Lite the only safe light for night riding.

Price, \$10

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The genuine Prest-O-Lite, when empty, can be immediately exchanged for a full one ANYWHERE and ALWAYS. Imitations can not.

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Protect yourself by accepting only tanks filled by the Prest-O-Lite Company. Look for our name.

The Prest-O-Lite Co. 246 East South St. INDIANAPOLIS, IND.

CANADIAN GENERAL OFFICE AND FACTORY, MERRITTON, ONT.

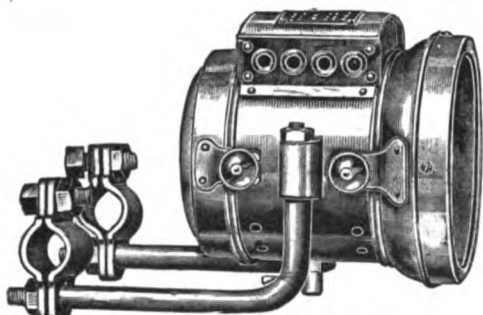
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Showing Back Closed

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that is the only direction in which progressive jobbers and dealers must look if they wish to build up business. Proper preparation to meet popular demand spells the difference between success and failure.

20th CENTURY LAMPS

(Motorcycle and Bicycle)

are business bringers, because they are always growing in popularity and demand. They are the lamps to look ahead with.

Unequaled for Lighting Efficiency, Practically Indestructible. Handsome and Compact.

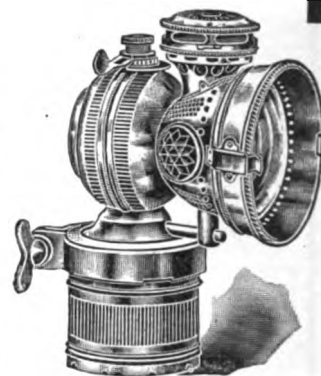
Riders appreciate the long range power (straight ahead) of the 20th Century Lamps, their unfailing Reliability and Simplicity. Note "open door to the lens" feature, for easy cleaning purposes, in Model 102. 20th Century Generators are much superior to the average. Special non-corroding and easy operating locking device is an appreciable feature.

Jobbers, Stock Up Now. Write for New Terms and Prices. Don't Wait for the Rush

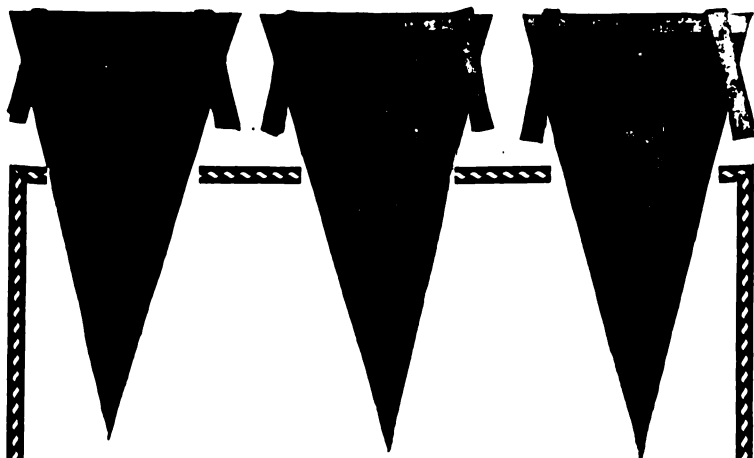
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BICYCLE No. 2
Combined Lamp and Generator



Spiegel Pennants Will Advertise Your Machine Effectively

Manufacturers will have to look very far to find a more efficient advertising souvenir than a pennant.

For the dealer there lies a tremendous amount of business in selling these pennants to the riders, every one of whom would be glad to have a pennant flying from his "bus."

By dealing directly with us you benefit by the lowest prices obtainable, as we are the manufacturers.

Write us at once for prices and send 10c. for sample pennant.

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Our New Supply Catalog is Ready. It will save you money on any motorcycle accessory you need, no matter where you live. Ours is more than a mere catalog—it is complete, beautiful and interesting—and it's FREE.

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Set of pedal rubbers (4).....	\$.51 prepaid
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Ask for "The Yellow Sheet."

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TWELVE THOUSAND RIDERS

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JOBBER, DEALER, RIDER WAIT!

AND WATCH FOR THE ANNOUNCEMENT SOON OF THE

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PLEASURE AND COMMERCIAL SIDECARS

A Revelation in Design, Finish and Construction

Exhibited at

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Is Your Motorcycle Belt Guaranteed Not to Stretch?

Every "Wetprufe" motorcycle belt is guaranteed not to stretch—guaranteed to be water-proof and weather-proof.

You want the best belt. If other belts were as good as "Wetprufe" they'd be guaranteed, too.

Buy the best belt—a "Wetprufe." It is guaranteed.

Your dealer can supply you with a "Wetprufe" belt. Additional "Wetprufe" facts if you will write us

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Try to get a RENOLD CHAIN user to transfer his allegiance to another make of chain. Then try to push the Rockies into the Pacific Ocean. One is as easy and simple as the other.

The user knows that each RENOLD CHAIN contains an assurance of perfect service. He knows that behind each

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For silence, durability, speed and strength, RENOLD CHAINS have long been recognized as being head and shoulders above all other makes. In England over thirty-six different motorcycle manufacturers fit RENOLD CHAINS to their product.

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Brr! My Hands are Freezing! You Need a Pair of Goodwear Hand Wind Shields

Heavily Waterproofed, Arctic Cloth, Wool Lined.

These shields prevent the wind from blowing up the sleeves and afford maximum protection for the hands in cold weather. They're absolutely indispensable.

Send us a dollar with the coupon shown here, which is good for 50c., and we will send you a pair of our \$1.50 Goodwear Hand Wind Shields, all charges prepaid, on ten days' trial. If unsatisfactory, send them back and we'll return your money. Let us send you complete catalog of our "Economy Line." Go to it.

Goodwear Specialty Mfg. Co.

Office 302

45 W. 34th Street, New York



REBATE COUPON — GOOD FOR 50c.

I enclose herewith \$1. Send me a pair of your \$1.50 Hand Wind Shields on ten days' trial. If they don't suit I will return them and get my money back.

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Address.....

30%
More Mileage

Save
The Tires

Every automobile owner and every dealer has been interested in watching our National advertising of Tirenex. The big demand, it has created means profit to the dealer.

TIRENEW
Prevents Tire Decay

is a liquid, unvulcanized rubber compound made with a base of pure gum—waterproofs and protects from oil, moisture, sun and air. Makes Tires Look Like New. There are imitations which paint but don't protect—insist on Tirenex. Send \$1.00 for a can—enough to Tirenex 8 tires. Ask about our other products:

Narco Rubber Reviver	Non-inflammable Rubber Cement	Leakanot, a liquid, rubber, waterproofing dressing for anything leather.
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HERE'S A REAL NOISE-MAKER!

No other bulb horn is operated like the

ACME SIREN

"THE LITTLE HORN WITH THE ENORMOUS RANGE"

A slight pressure of the fingers upon the bulb and the result is astounding. Immediately a shrill, whining shriek is heard. As an effective road clearer the Acme is startlingly efficient. Those dealers who have not yet catalogued the Acme should write us at once for electrotypes.

Sarco Engineering Co.

112 Broad St., New York



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Governs and administers the sport of Motorcycle racing and other competitions in which motorcycles engage; it defends and protects the rights of motorcyclists and facilitates touring; it encourages the use of motorcycles and promotes the general interests of motorcycling.

For F. A. M. Booklet and all information write

E. M. ESTABROOK

Chairman Membership Committee F. A. M.

Bangor, Maine

Start Your Engine Easily Even on the Coldest Day

When you have the proper amount of oil in your engine you can start and pedal with the utmost ease. Even on the coldest day.

Only with the Simplex Oil Gauge can you tell the exact amount of oil that is in your engine.

Fits all machines that have no oil gauge on the crankcase. Easily attached in a few minutes. Riders often ruin their engine cylinder because of insufficient oil. With the Simplex you can run thousands of miles without taking down your engine to remove carbon, because it keeps oil at the right level.

THE SIMPLEX OIL GAUGE.
"In sight and out of the way."

The Simplex is handsomely nickelplated—a little larger than a silver dollar and is only $\frac{3}{16}$ " thick.

The Simplex keeps clean. It prevents your plugs from fouling—saves its cost in oil in a few weeks.

Fits Harley-Davidson, Excelsior, Thor, Flanders, Etc.

Order One Today—\$1.50, Postpaid.

Without any obligation or charge on your part, you can try the Simplex Oil Gauge for 30 days. If it is not O. K. you can return it and your money will be refunded. Nothing could be more fair.

Order today. Mention your dealer and name of machine. Circular free.

THE BUCK SALES COMPANY,

211 N. 12th Street, St. Louis, Mo.

WOULDN'T IT BE A PLEASURE

to run through a whole season on an oil that lubricates perfectly, and without having to bother with "fouled" plugs or "carbon" troubles?

HARRIS AUTOIL

WILL GIVE
YOU THESE
RESULTS.

Try Some At Our Risk for 30 Days.

Have your dealer get you some or send direct for delivered price and Booklet—HOW TO TELL PENNA. OILS.

HARRIS OIL CO. - 620 Mulberry St., Muncie, Ind.



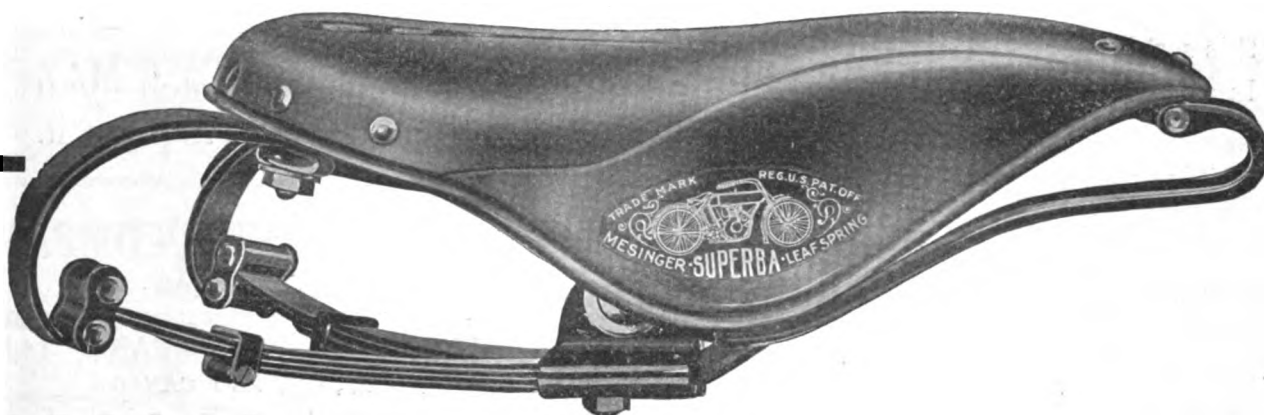
TAKE the precaution to have your 1913 machine especially reliable—buy it fitted with the Bosch Magneto and Bosch Plugs—the ideal ignition system; no other is just as good. Bosch Plugs, \$1.00 ea.

Write for Literature

Bosch Magneto Company

223 West 46th Street

NEW YORK



It Looks Like a Clean Sweep for the Mesinger Saddles

The "Superba" is the nearest approach to an automobile cushion that any motorcycle saddle can attain.

Absolute riding luxury is afforded by this autocrat of saddles. For 1913 every high class motorcycle will offer as an option the Mesinger "Superba," "Standard," "Cavalry." Already considerably over 50,000 saddles have been ordered for 1913 models.

For the rider who desires a consistently comfortable, shape-retaining, tremendously durable saddle, the Mesinger line will adequately fill his requirements.

H. & F. Mesinger Manufacturing Co.

144th Street, Austin Place, N. Y.

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Halt! Dealers in New England!

PROFITS!



The Excelsior is not only conceded by "those who know" to be all that is desirable in a perfect motorcycle, but the enormous publicity campaign inaugurated for 1913 will make this fact known far and wide throughout the country. If you are a dealer in VERMONT, NEW HAMPSHIRE, MASSACHUSETTS OR NORTHEASTERN NEW YORK, this is your opportunity to secure the agency for your town. It means BIG BUSINESS for you. Write for our proposition.

J. W. Grady & Co.

Worcester, Mass.

The
Spark



Famous
Plug

Guaranteed for Life

(Including Porcelain)

Not only do we guarantee easier starting, more power and less gas—but we guarantee this service for Life.

Is a life-time of trouble-proof spark-plug service not worth \$1.25 per plug?

At all reputable Dealers.

Your Community has a V-Ray Dealer

Manufactured by

The M.M.M.M. Co., Inc., Marshalltown, Ia.

OLD SOL'S

LIGHT is steadily coming nearer. He will flash the full power of his rays in the next issue of this publication.

And it will be a dazzling light.

No need to watch—you won't be able to miss it.

HAWTHORNE MFG. COMPANY

WORCESTER, MASS.

OR

POLLOCK MFG. COMPANY, Ltd.

BERLIN, ONTARIO, CANADA

"OMC"

Motorcycle Supplies

If you want to secure "Gulliver" quality at "Lilliput" prices—or in other words—a lot of value at small cost, send for our catalog of OMC motorcycle supplies. Everything for the dealer and rider. Don't fail to get our catalog.

OBERWEGNER MOTOR CO.

TOLEDO, O.

Look For the "White Strip"

On the Belt You Buy. It Means:

1. **Guaranteed Stock and Construction.**
2. **Three times the strength of ordinary leather.**
3. **An end to stretching troubles. It is guaranteed not to stretch.**

We make White Strip Stretchless Flat Belts, White Strip Stretchless V-Belts, Sea Lion Waterproof Flat Belts, Chiboco Pulley Laggings, Sea Lion Waterproof Cement and Sea Lion Belt Dressing.

SEND FOR OUR CATALOG—IT WILL INTEREST YOU

Chicago Belting Company

124 N. Green Street
Chicago, Ill.

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Keep your feet always on the Pedals



The deep rubber corrugations in the big cushions on

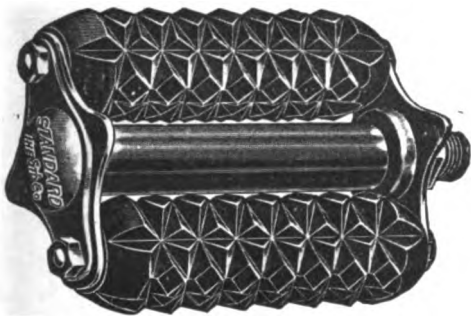
STANDARD PEDALS

keep the feet in the proper position. When going over rough roads, the constant jarring and bumping makes it very uncomfortable for the rider who cannot make his feet stay "put"—not to mention the fact that he cannot readily use his brake.

STANDARD PEDALS insure the utmost comfort for the feet. They have been in consistent use by the majority of motorcycle manufacturers for many years, and you can have them on your motorcycle if you insist on Standard Pedals.

Dealers—send for electrotypes and description of our line. It is well worth handling.

THE STANDARD COMPANY
TORRINGTON, CONN.



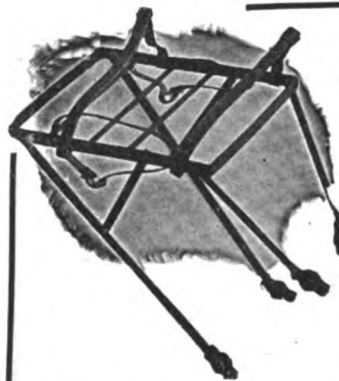
1913 Agencies Open

Our factory facilities have been increased so that now we can care for many times the business we had in 1912. Those dealers, as our competitors, who were disappointed in the machines they sold should look into the merits of the

JEFFERSON

The 1913 Models are marvels of mechanical perfection—and any dealer will be proud to sell them. In this small space we can't tell of the features of these new machines, but if you are interested write today for specifications and dealers' special proposition for 1913.

WAVERLEY MFG. CO., Waverley Pl., JEFFERSON, WIS.



Dealers! Riders!

Here's the ideal luggage carrier. Built scientifically—can withstand considerably over two hundred pounds weight. Just the thing for tandem riding. Adjustable to all motorcycles.

The "Star" Luggage Carrier

is sold by the leading jobbers in the country. Write for our catalog.

Star Electric Co., 18 No. May St., Chicago, Ill.

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"The Little Fellow with the Big Grip"

THE MIAMI CYCLE & MFG. CO.
MIDDLETOWN, OHIO

Licensed Coaster Brake Manufacturers

Afford Perfect Traction— Prevent Slipping and Skidding

Mud, sand, slippery pavements or snow will not spoil your sport if you always carry Weed Chains.

Easily carried, as the small bundles they make in their canvas bags take so little room that they could be carried in your pocket, when not in use, without inconvenience.

Order them from your dealer or write Dept. B for particulars

Weed Chain Tire Grip Co., 28 Moore St., New York

WEED ANTI-SKID **CHAINS** FOR **MOTORCYCLES**



Speed
With Safety
on the Motorcycles!

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

"A FEW CENTS IN THE LOCK IS WORTH FIFTY IN THE REWARD"

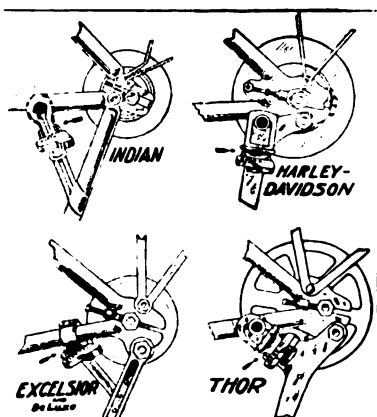
"Motorcyclist's Book of Proverbs"

¶ Keep your name off the list of "Stolen Motorcycles." Almost daily you see mention of another machine stolen. Laws against motorcycle thieves are weak and the only way to thoroughly protect yourself is by locking your machine so it cannot be moved except by YOU—and the only lock that prevents machine being moved and that cannot be picked, pried or cut, is the "SABO."

¶ You can safely leave your motorcycle anywhere if you have a Sabo lock. It fits tight to the frame—cannot be pried off—there are no chains to be cut by pliers. You've got the goat of every motorcycling "Jimmy Valentine" that wants a ride on your gasoline. The lock is scarcely noticeable. The would-be thief will perhaps not see it; will walk up to the machine acting as if it were his own. But when he tries to move it from the stand he'll learn "Sabo's on the Job."

¶ It's made of bronze metal, neat, simple, strong—fits your smallest pocket—lasts forever. The stand is locked securely to the frame—the machine cannot be moved while the lock is there—no danger of breaking spokes or chain by forgetting the lock and pushing machine from stand. It is impossible to wheel or ride the machine away.

¶ We prefer to have you buy from your dealer, but, if he does not have it, send this order blank with \$1.25 and the lock will come back to you, satisfaction guaranteed, prepaid, by return mail.



JOBBERS

List this in your 1913 Catalog. Cuts, literature and advertising matter furnished. Write for proposition.

DEALERS

Stock this lock. Showing it means selling it. We refer inquiries, furnish cuts, literature, etc. Send for proposition.

Aermore Manufacturing Company

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Aermore Manufacturing Co.

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Enclosed find \$1.25 for a Sabo Motorcycle Lock for machine.

NAME.....

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DEALER'S NAME.....



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DIFFERENT motorcycles need different lubricating oils.

Some one of the several grades of Gargoyle Mobiloil will get the greatest efficiency from your motorcycle.

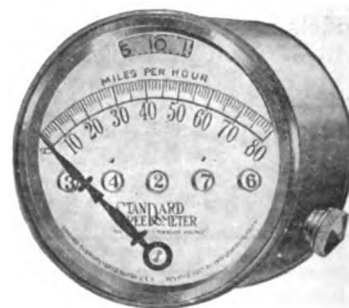
Send us the name and model of your motorcycle. We will tell you the grade of Gargoyle Mobiloil that is best suited to it.

VACUUM OIL CO., Rochester, N. Y.

DETROIT Ford Bldg. BOSTON 49 Federal St. NEW YORK 29 Broadway CHICAGO Fisher Bldg.
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Distributing warehouses in the principal cities of the world.

THE NEW 1913 STANDARD SPEEDOMETER



YOUR CHOICE IF YOU WANT THE BEST
ACCURATE—DURABLE

UNBREAKABLE FLEXIBLE TUBING
HEAVIER BEVEL JOINT—NICKEL STEEL GEARS

Our Patented Swivel Fitting for Attaching the Speedometer to Spring Fork Motorcycles is the Only Practical Method in Use.

The Sale of Infringing Devices is Prohibited.

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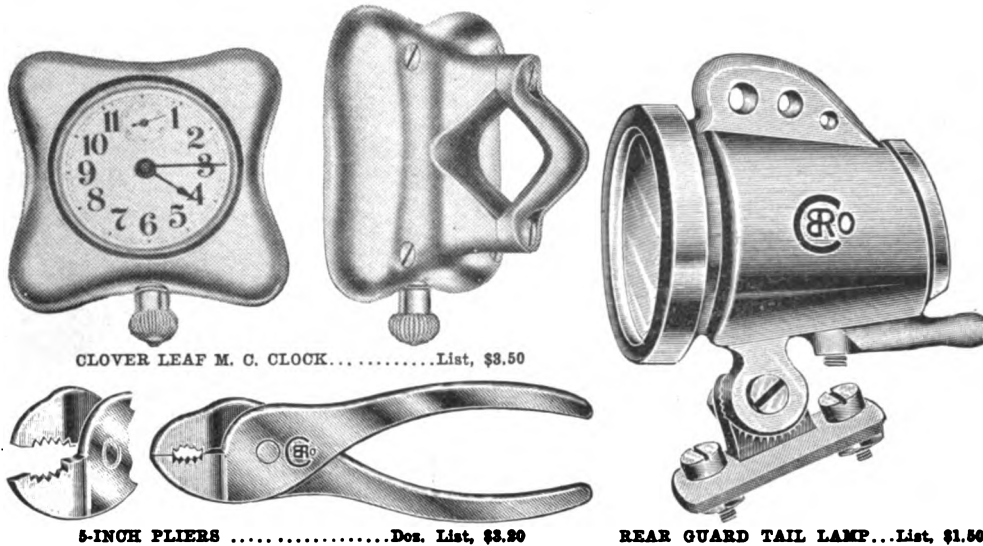
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The Volume of Our Business Insures Prompt Service—Reliable Goods

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Casings
Cement
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Cyclometers
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Goggles
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Spark Plugs
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Wrenches

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Federal Rubber Manufacturing Co. - Milwaukee

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SERVICE"



GET
Auburn
Motorcycle Spark Plugs
for your 1913 Equipment
THEY WORK WHILE YOU RIDE

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MONARCH

"The Big Single with Twin Power"

DEALERS! Watch for our announcement. It means a great deal to you. Learn how really perfect a motorcycle can be made. Learn the true meaning of "class" manufacture.

Send for our Catalog I

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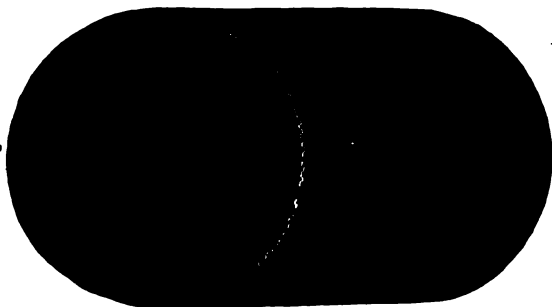


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Service Chain has been adopted by all High Grade Makers—Why?—An investigation will show you

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AN AIR-FILLED MOTORCYCLE TUBE POSSESSING VERY UNUSUAL FEATURES:

- First: It withstands a tread puncture without deflating the tube.
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AIR FILLED ONLY.

Punctures are self-closing by reason of a scientific but simple principle of construction.

NO "DOPE," GUM, PASTE OR OTHER STUFFING MATERIALS.

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For Your
Motorcycle
use a

HEITGER Carburetor

PERFECT CONTROL
From 1 to 100 Miles

More Speed
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LARGEST MOTORCYCLE SUPPLY HOUSE IN AMERICA
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should be equipped with chains that will stand up under all conditions. You can depend upon the "Whitney" Chain whether in rain, mud, sleet or snow; they are always on the job. They give the maximum amount of service because they are made by men with years of experience in chain making.



When making replacements insist on a "Whitney."

*"Whitney" Chains
Are Built for Strains*

The Whitney Mfg. Co.
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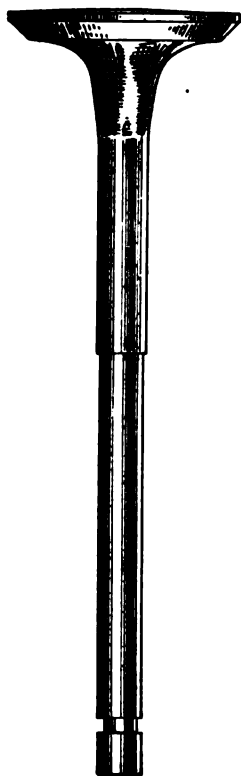
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get the hardest use of any gas engine valve. The problem is to make them so they will not break or burn up.

By using the toughest steel, properly heat treated, we overcome the breaking, and by welding a cast iron seat to the head we eliminate the pitting, burning and warping.

Long service in the most popular machines has proven these things.

If you are not using them, will you go into the matter with us?



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Superiority Wins! Ten months ago we announced to the trade for the first time our now famous line of DeLuxe Motorcycle Motors. Today many prominent motorcycle manufacturers are using DeLuxe motors and they are the most talked of sensation of the present season.

Why?

Because of the following noteworthy features, some of which are:

- Rigid Crankshaft.
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- Improved Cam and Magneto Drive.
- Oil Tight Motor.
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- Simplified Design Throughout.
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- High Power Development.

FOUR SIZES

- 4 H.P. Single Cyl.
- 5 H.P. Single Cyl.
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- 9 H.P. Twin Special

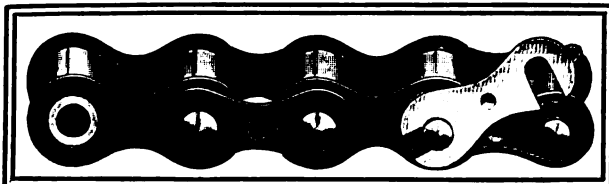
1913 Will Be a DeLuxe Year

Motorcycle Manufacturers, place yourselves in a position to supply the certain demand.

THE F. W. SPACKE MACHINE CO., Indianapolis, Ind., U. S. A.

Motors DeLuxe

**No. 150
DIAMOND CHAIN**



**DESIGNED ESPECIALLY FOR
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Because it is known to be dependable under all conditions—this chain is the particular choice of motorcycle riders who use their machines day after day, in all kinds of weather.

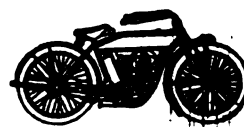
The transmission of your motorcycle is one of its most important parts—be sure you have the best.

LOOK FOR THIS

TRADE  MARK
ON EVERY LINK

DIAMOND CHAIN & MFG. COMPANY
W. GEORGIA ST. INDIANAPOLIS, IND.
CHAIN MANUFACTURERS FOR 22 YEARS
CAPACITY, 8,000,000 FEET PER YEAR

142



**THIS IS THE
TIME TO BUY
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AT 1/4 to 1/3 THE PRICE WHEN NEW

We specialize in selling standard makes of motorcycles and automobiles in slightly used condition.

Large assortment of used motorcycles, single, two and four cylinders; chain, belt or shaft driven—Indian, Pierce, R-S, Excelsior, Curtiss, F. M., N. S. U., M. M., Harley-Davidson, Thor, New Era, Merkel and other high-grade makes from \$35 up.

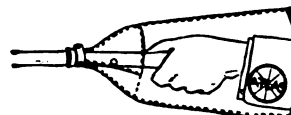
Practically all styles and makes of automobiles at \$100 up.
We guarantee each purchase to be in perfect running condition.

Agents wanted everywhere. Write for price lists and descriptions.

GREEN'S PURCHASING AGENCY (Dept. M. L.)
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NOW IS THE TIME TO STOCK UP

With Atlas Fur-lined Hand Windshields and our other Cold Weather necessities.



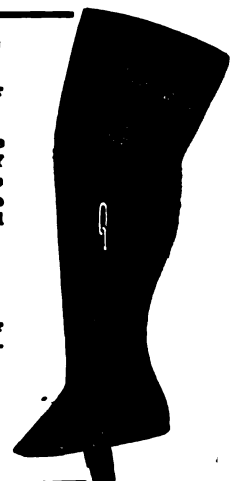
We manufacture a complete line of Leggins, Magneto Covers, Luggage Carriers, Tail Lamps, etc.

- Mohair, Wool lined, per pair, \$1.50.
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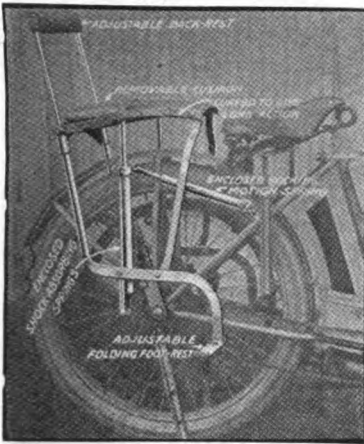
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THE "STOLL DREAM" TANDEMS

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A FEW FEATURES:

Adjustable folding footrest. Artistic design and finish. Rocking Motion, making Back-rest comfortable over the roughest country roads. "Just floats along." Back-rest can be raised or lowered instantly while riding.

DROP US A CARD AND LET US TELL YOU MORE ABOUT THEM
GOOD PROPOSITION TO DEALERS. FITS ANY MACHINE

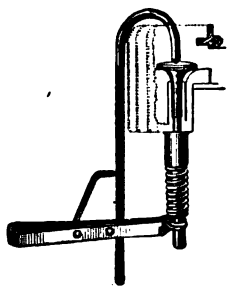
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INSURE A GOOD COMPRESSION—ALWAYS

It is important, if you want all the power your motor generates, to keep your valves in condition. An occasional grinding keeps your compression at its most effective point. For cleaning and grinding your valves the

Simplex Exhaust Valve Remover

is the only tool that can be made to readily fit all machines. It is the most convenient little appliance on the market—a repair shop necessity.

PRICE 50c.

Liberal discounts to jobbers and dealers. We also make the famous Simplex Side Cars and the Simplex Magneto Cut-out. Write for our booklet.

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Enemies of Friction

Why don't you "Standardize"?

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A Porcelain Motorcycle Spark Plug!

Made for Motorcycle Service Only

No need any longer to use the inferior mica plug or a makeshift porcelain. This new Motorcycle Standard Spark Plug, built by the greatest manufacturer of spark plugs in the world, gives motorcycle riders a plug with a porcelain insulator that is faultless, defies heat and insures perfect ignition.



\$1.00

Motorcycle Standard Spark Plug

Leading motorcycle engineers of the country have pronounced this plug right in principle and construction. The length over all is 2 1/4"—just the right size for the limited dimensions available for a spark plug in the motorcycle motor. The porcelain is made in our own potteries. Heat cannot crack it. The bushings are case hardened. The terminal nut will take ordinary wire, ring, or special "Indian" terminal.

Comes in half-inch or metric sizes. Your dealer will supply you—or sent prepaid on receipt of price and size.

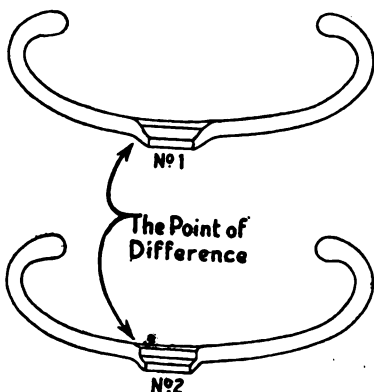
PRICE—\$1.00 per plug

Our guarantee—"Your money back or a new plug, unless you are absolutely satisfied."

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Mott Rims for Strength

THE superiority of the Mott motorcycle rim lies in the little points that the average riders never notice, but that show up strongly in hard service. For instance, take the way the spoke holes are punched. On Mott rims this is carefully and accurately done so that there is ample strength to hold the nipple securely. Sketch No. 1 shows the idea. Most other rims come out like No. 2. This part of the work is hurried over, carelessly done, and as a result the holes are counterpunched too deep, making a weak spot, which often allows the nipples to pull through the rim.

Mott thoroughness shows up in the tests. Note the wheels that come through the severe endurance runs in the best condition. You'll find them fitted with Mott rims. To be sure of satisfaction, specify Mott rims for your machine.

WRITE US FOR FULL DETAILS

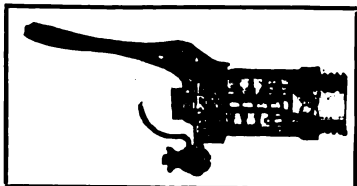
THEY WILL SETTLE THE RIM PROBLEM FOR ALL TIME

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Patented in Europe



Patented in America

SPEED With Economy

The M&M requires a 1/4" pipe tap to insert into manifold. It is made with six portholes, which when open, admits auxiliary air into the manifold.

The M&M Economizer will save you from 40 to 50% of gasoline, and will give you 20% more speed and power with less gasoline and less carbon.

It is the only known carburetor adjuster on the market. Do not throw your old carburetor away, before you have tried our device. **THEN NOTICE RESULTS.**

It is great for priming the engine. When going down grades, it cuts off all gasoline and ignition.

PRICE \$1.25 PREPAID.

The M&M is a nickel-plated device, highly polished, and it is positively air-tight when closed.

Guaranteed to give satisfactory results.
Money refunded in 30 days if unsatisfactory.

BEWARE OF INFRINGEMENTS.

Send for full information
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Motorcycle
IMMEDIATE



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DELIVERIES

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ANGSTEN-KOCH COMPANY
MAKERS OF
GOOD SPECIALTIES
CHICAGO

ARE you troubled with belt slipping, Mr. Rider? Do the screws in your lagging cut grooves in your belt? We can overcome this for you, also prevent your belt from getting glossy. The only cure today is



ABESTO
PULL-E-TAPE

Applied in a minute, self vulcanizing. Dealers, this is something for you, get our proposition—it is as good as our Tape. 50c per Roll—send for some today and save your belt. State width.

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The New "N. A." BREEZE

Delivers a larger volume of properly mixed gas than any other motorcycle carburetor in the market.

Works Perfectly When Throttled Down to 230 Revolutions Per Minute.

At over 3,500 revolutions it is just as effective.

All air ports have been enlarged.

A perfect mechanical device to increase gasoline supply automatically with the opening of the throttle has been fitted.

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SPLITDORF

"Always There"

SPLITDORF PLUGS are gas-tight, soot-proof and unbreakable and never need monkeying with. Insist upon **SPLITDORF**—they are **STANDARD**.

Write for new catalog

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The Neverout
TRADE MARK

Gas Lighting
Outfit

FOR MOTORCYCLES

Many attempts at gas lighting of motorcycles have been made. So few of them were successful that both manufacturers and users of motorcycles importuned us to design a motorcycle gas lamp and generator that would be really effective. They knew the reputation of the name **NEVEROUT** in the bicycle, the carriage, the auto and motor boat field—and they wanted lighting apparatus just as good for their motorcycles.

To produce it required exhaustive tests, but our past experience and our equipment have enabled us to produce and endorse the **NEVEROUT** motorcycle headlight and generator shown here. Efficiency, simplicity, reliability and elegance of design are combined in this apparatus. Write for literature.

For sale by leading dealers. Made only by

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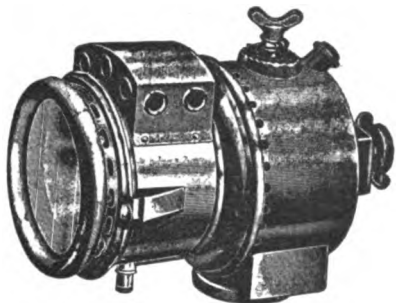
When ordering this latest creation in motorcycle lamp-dom. Not an undesirable feature about it.

Every Line Perfectly Designed

Depth, 5 in.; Dia. Door, 3 in.; Height, 5 in.; Weight, 24 ounces; Finish, nickel plate. Efficiency and Durability guaranteed.

List \$5.00

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"INFALLIBLE LINE"**Motorcycle Accessories**

For Quality and Efficiency—All that the name implies

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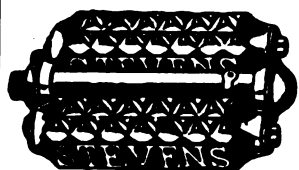
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\$1.25

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Celebrated Motorcycle Pedals
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FRAME PUMPS
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Oilproof
VACUUM CUP TIRES

PENNSYLVANIA RUBBER COMPANY

Branches—Coast to Coast

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IT'S GUARANTEED

1. To increase power 20%;
2. To save 20% Gasoline;
3. To Remedy Carbonization;
4. To Keep Engine Cooler.

You will never know how perfect your Motorcycle can run until you try SPEEDO. Attached in five minutes on intake manifold. Your money is refunded if you are not pleased.

PRICE, \$2.00, Including Decarbonizer

See Your Dealer or Write

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GET WHIPPLE'S NEW "DATED" SECOND HAND LIST

Prices have "TUMBLLED"—Are you "HIP" to "WHIP"? He's handing them out fast. Ask for DATED LIST. If you delay you lose, if decisive you win. Now's the time to buy a good, used machine (and buy it right). We ship to all points. We are RESPONSIBLE; if you don't know "Whip" ask any real motorcycle man or any large dealer.

WHIPPLE THE MOTORCYCLE MAN

WHIPPLE MOTORCYCLE BUILDING
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Save One-Quarter

the purchase price of motorcycle accessories and parts. We sell guaranteed goods twenty-five per cent cheaper than any other house

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Also Pattern Work

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Mosler Spit Fire
Plugs
ARE THE BEST

A. R. MOSLER & CO.
P. O. BOX 101
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Four models to choose from at \$65 to \$80.

1913 catalogs now ready.

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for your motorcycle. Nothing too old, nothing too new for us to buy. We will buy one or a hundred.

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The Militaire Auto Co., Inc.

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All
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"All The Power Without The Jerk"

Combine tremendous strength, absence of stretching, with durability and that flexibility so desirable in a motorcycle transmission, and you are assured perfect transmission service. Smooth, easy, non-jarring riding is possible with the SPARTAN BELT.

There must be some good reason why 90% of the belt-driven motorcycles are equipped with SPARTAN BELTS. The secret lies in our method of tannage. By this process every SPARTAN BELT is given an "immunity bath" and is proof against all weather conditions.

No heat, cold, water or other element can cause the

SPARTAN

Belt to lose its flexible, powerful efficiency.

If comfort, convenience, strength, long life, simplicity and silence hold any weight with you in the selection of a transmission, then

Spartan Belts

have gained still another firm adherent.

We wish to extend to all our friends our most cordial holiday greetings and best wishes for a bright New Year.

The Graton & Knight Mfg. Co.
Worcester, Mass.

Branches in All Principal Cities
Canadian Distributors, CANADA CYCLE AND MOTOR COMPANY, West Toronto - Winnipeg - Vancouver

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7

THURSDAY, JULY 25, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
15

Conclusive Proof that this is
the ideal Tourist's Motorcycle—

The *Indian*
Motocycle

Of the hundreds of motorcyclists who took part in the four F. A. M. tours to Columbus, Ohio, last week, no less than 70 per cent. were riding Indians.

When you are familiar with the Indian Motocycle's illustrious record, it is easy to understand its popularity.

"Count the Indians on the Road!"

In the racing contests at Columbus, the Indian Motocycle made a clean sweep of all F. A. M. Championships, *amateur and professional*.

Over 16,500 Indians of the 1912 Model are now on the road
The HENDEE MFG. CO., Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

LONDON

Goodyear Motorcycle Tires Make Another Killing at Columbus

At The Largest And Best Motor- Their Splendid Speed And Reliability.
cycle Track In The World, These Goodyear Machine Made Motorcycle
Durable Tires Dazzle All With Tires Prove Superior At Every Turn.

Never before in the history of tiredom has a single make of motorcycle tire captured so many honors and so indisputably proved the claims of its makers as did the Goodyear at the F. A. M. Meet, Columbus, from the 18th to the 21st.

Previous to these events every world's speed record, both amateur and professional, was held by Goodyear motorcycle tires. Men have come to look upon these as the winning tires—tires that never fail to render the service demanded.

Note in the bulletin below how these winning tires swept all before them in the Columbus Races.

BUILT ON TIRE MACHINES.

The unequalled quality of Goodyear tires is due to the manner in which they are constructed. Thirteen years of No-Rim-Cut auto tire experience is back of them.



The Goodyear tire machine, one of the evolutions of these thirteen years of experience, is responsible for the durability of these tires.

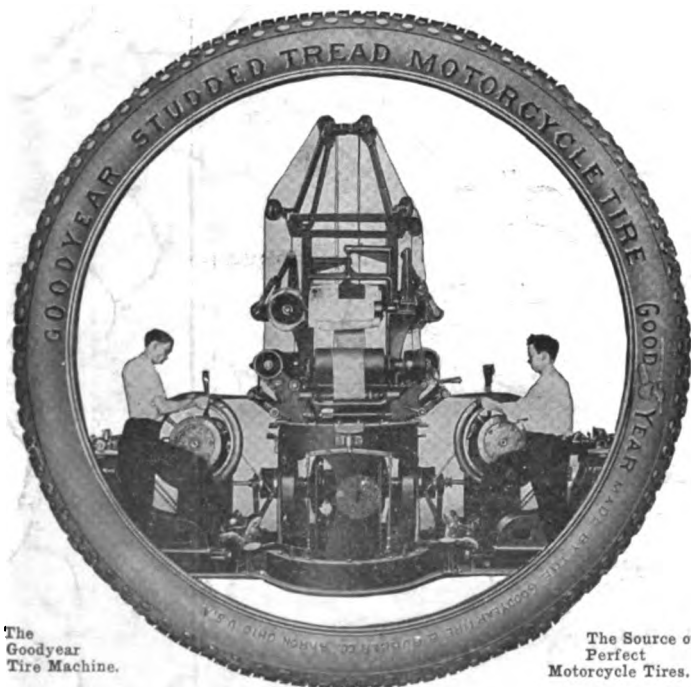
This machine abolishes the possibility of flaws that are bound to creep into the common tire—the tire that is stretched by hand.

For this machine stretches on every layer of fabric with absolute **uniformity of tension**. No matter how big or little, strong or tired the operator is, this machine does its work without the slightest variation.

The result is a tire that the world recognizes today as being the leader—

A tire that holds every world's record for speed, and a tire which, in countless tests, has proved to be the most durable motorcycle tire in existence; a tire that reduces the danger of punctures and blow-outs, that minimizes tire cost, that affords riders the very maximum of service at the price they pay for common tires.

Because of the unequalled durability of Goodyear Motorcycle tires, every motorcycle manufacturer in the country has made contract for, and is recommending our tires wherever possible.



GET OUR BOOK ON MOTORCYCLE TIRES

An interesting booklet on motorcycle tires is yours on request. It is full of information that every motorcycle rider should have. Send for it at once.

BULLETIN OF COLUMBUS MEET

Columbus, July 21.—National F. A. M. Amateur Championship won by Constant, receiving Bosch Trophy. Seymour broke 3-mile record in 1:56; fastest rider in America. Every race at Columbus was won on Goodyear tires, twenty-one in all.

THE GOODYEAR TIRE & RUBBER CO.

Akron, Ohio

Branches and Agencies in 103 Principal Cities.

Full Line of Motorcycle Tire Accessories.

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THURSDAY, AUGUST 8, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
16



The Most Popular Motorcycle
for Public Service—

The *Indian*
Motorcycle

The Indian has been for many years the favorite machine for use in the service of the public. Over 200 public service bodies now patronize the Indian exclusively. This is not counting the many telephone and electric companies, gas companies, etc., which equip their men with Indians.

Philadelphia, Pa., has recently ordered 50 additional twin cylinder 1912 model Indians for their motorcycle squad equipment. They have been using the Indian for the past six years exclusively.

Over 17,000 Indians of the 1912 Model are now on the road

The HENDEE MFG. CO., Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

LONDON

"Count the Indians on the Road!"

Let Motorcycle Riders Answer These Questions on Tires

The oldest and most experienced and most successful motorcycle riders, both of endurance and race track fame, use Goodyear Motorcycle Tires. Why is it?

Every amateur and professional world's record is held by these tires. Why is it?

Goodyear Motorcycle Tires have won and to-

One or two victories on the race track do not establish the speed supremacy of tires. Neither do one or two endurance runs with a wonderful show of mileage, point to anything definite as regards durability. It is the perpetual performance of the tire that counts.

There can be no coincidence, no mere good luck when a tire continuously wins everything in sight; nor in a tire that continuously renders more mileage than all other tires—as do Goodyears. It is in these daily performances that you find the unquestionable proof of highest quality.

Because of these performances, now known to all the riders of the single-tracker, every other motorcycle will be equipped with Goodyear Tires next year.

day holds contracts from every motorcycle manufacturer—Why is it?

Goodyear Motorcycle Tires hold not only a speed records but they also hold the record for durability. Countless tests prove them the most durable tires in existence. Why is that?

The answer solves the question of real tire service.



And riders will save an endless amount of trouble and expense as a result. Their tire troubles will be practically ended.

Made by Makers of No-Rim-Cuts

Men now admit that the No-Rim-Cut is the kind of auto tires. Over 1,400,000 of these tires have been used. There has been plenty of chance for comparison. Results have proved their superiority.

Goodyear Motorcycle Tires, designed for ordinary road use as well as for racing, are built under the same roof and by the same makers as No-Rim-Cuts.

Is it any wonder that these motorcycle tires have gained precedence over all others?

Built on Goodyear Tire Machines

The Goodyear Tire Machine is an evolution of our thirteen years tire making experience. Unlike the hand method commonly used, this machine stretches on each ply of the tire fabric with an absolutely uniform tension.

So unlike the hand-stretched tires there can be no too-loose or too-tight plies to break down and cause blow-outs, in a Goodyear Tire. Durability is no longer a matter of guess work. With Goodyears it is a matter of science.

This is but one of many ways we take to build excellence into Goodyear Motorcycle Tires. The most durable tires in existence, yet they cost no more than any standard tire.

Why don't you begin today investigating Goodyear tires—tires that render most service at least cost?

BULLETIN

Newark, N. J., July 27: Eddie Hasha on Goodyear tires makes new Eastern record for mile. Time, :38 2-5.

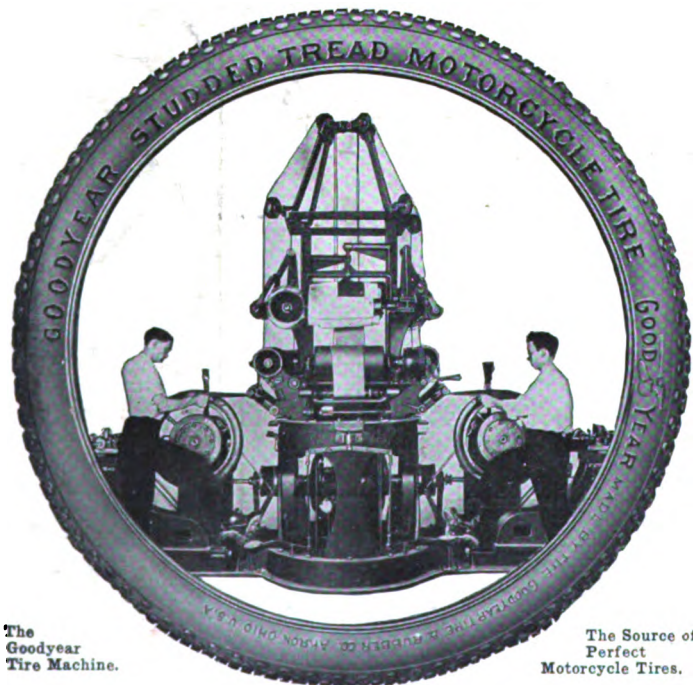
Riverview, July 31: Eight events and all won on Goodyear Tires. The stars were Renel and Champion Raymond Seymour who never lost a heat, winning three straights and taking Edgewater sweepstakes, 6 miles. Time, 4:09 2-5.

Write for Our Booklet on Motorcycle Tires

This book explains all—describes the most complete line of motorcycle tires in existence. Write for it today.

Goodyear Pneumatic Tires are Guaranteed when filled with air at the recommended pressure.

When filled with any substitute for air our Guarantee is withdrawn.



The Goodyear Tire Machine.

The Source of Perfect Motorcycle Tires.

THE GOODYEAR TIRE & RUBBER CO.

Akron, Ohio

Branches and Agencies in 103 Principal Cities. We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits.
Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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THURSDAY, AUGUST 22, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
17

Application for 1913 Agency of

The *Indian* Motorcycle

Should be forwarded to us now. We are ready to consider them for the next year's model.

With over 100% increase in manufacturing facilities, machinery equipped with every modern device, an engineer staff constantly working out improvements and a host of expert mechanics making the motorcycles—our 1913 year will be not only the greatest in the history of the Indian but of the whole motorcycle industry.

By September 1st we will have shipped over 19,000 Indians of the 1912 model. Each one sold through an Indian Agent.

Now is the time to apply for 1913 Indian Agency.

The HENDEE MFG. CO., Springfield, Mass

(Largest Motorcycle Manufacturers in the World)

CHICAGO

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LONDON

"Count the Indians on the Road!"

A SAVING TIRE FOR MOTORCYCLISTS

Goodyear Motorcycle Tires are saving thousands of dollars for motorcyclists.

Next season they will mean a still bigger saving. For every motorcycle manufacturer in America has contracted for them.

Tests without number on our tire testing machine have proved the utter superiority of these tires.

These tests in which every other make tire is tried out, prove Goodyears to be the most durable tires in existence.

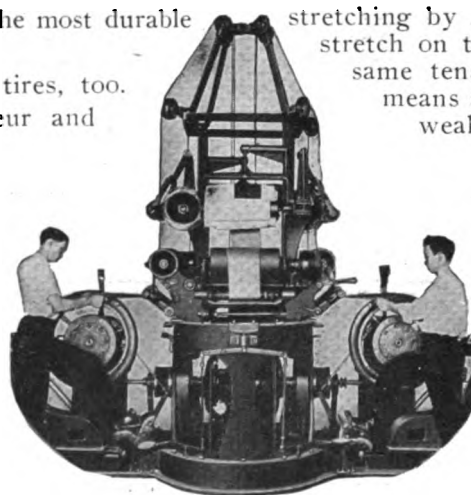
We build resiliency into our tires, too. They hold every world's amateur and professional speed record.

They are the tires that are satisfying all classes of riders.

MADE BY MAKERS OF NO - RIM - CUT TIRES

Goodyear Motorcycle Tires are made by the makers of Goodyear No-Rim-Cut Tires. Over 1,400,000 of these automobile tires have been sold. They render incomparable service. Now the world recognizes their superiority.

The same kind of quality that has made this tire famous is doing the same now for our Motorcycle Tires.



OUR TIRE MACHINE

Out of our years of tire building experience, we invented the tire-machine. This machine builds a flaw-proof tire. It is the only positive method by which flaws and weak spots can be kept out of tire construction.

A tire is made by stretching one ply of fabric over another. The usual method is to do the stretching by hand. But no human being can stretch on these plies hour after hour at the same tension. Yet uniformity of tension means strength of tire. Lack of it means weakness.

But with the Goodyear Tire machine weights do the stretching. The weights never vary. So the tension is always the same. Weak spots are thus eliminated. And our tires are thus able to successfully withstand tests of durability.

A TIRE THAT LASTS

This machine-built feature is only one of the many points of interest in our construction.

Altogether they have resulted in a motorcycle tire that is as perfect as a tire can probably ever be built.

Altogether they mean a vast saving in time and trouble and expense to riders.

Altogether they have been big factors in simplifying motorcycling and making it the popular sport of today.

SEND FOR OUR BOOK ON MOTORCYCLE TIRES

Every rider or prospective rider of a motorcycle should have this book and the vital facts on tire construction that it contains.

Write for it at once.

Goodyear pneumatic tires are guaranteed when filled with air at the recommended pressure. When filled with any substitute for air our guarantee is withdrawn.

BULLETIN Ray Seymour on Goodyear Tires won four cornered match race, three miles, time: 2 minutes, 1-5 second; won six mile Irving Park Sweepstakes, time: four minutes, eight seconds, also on Goodyears. Latter is track record.

Chicago, August 12.

THE GOODYEAR TIRE & RUBBER CO., Akron, Ohio

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Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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THURSDAY, SEPTEMBER 5, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
18

SOME MOTORCYCLE DEALERS ARE unfortunate in starting wrong. They rely too much on misleading advertisements and the promises of traveling men,—who themselves are not familiar with manufacturing conditions. The dealer, too, often fails to investigate the capital, organization and manufacturing facilities of the concerns seeking to do business with him.

Hundreds of dealers have been disappointed this past season—which means that they have been compelled to conduct their business at small profit, if any.

If you are contemplating handling motorcycles in 1913, we believe you will be interested in becoming a dealer in **Indian Motorcycles**. Vacancies occur from time to time in choice territories. We occasionally find it desirable to make a change.

We are ready to consider applications now. Write today.

*NOTE—Over 19,000 Indians of the 1912 model,
all sold through dealers, are now on the road.*

THE HENDEE MFG. COMPANY, Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

LONDON

“Count the Indians on the Road!”

These Motorcycle Tires Set Every Pace

Motorcyclists who want to ride fast have learned that they can rely on Goodyear Motorcycle Tires.

So have those who want to ride far.

When all these are counted there are but few riders left for other tires.

Goodyear Motorcycle Tires are the fastest, easiest riding, most resilient tires on the market. They hold every world's record. Both amateur and professional.

And tests on the Goodyear testing machine where all tires are tried out side by side, prove that they excel all others in durability.

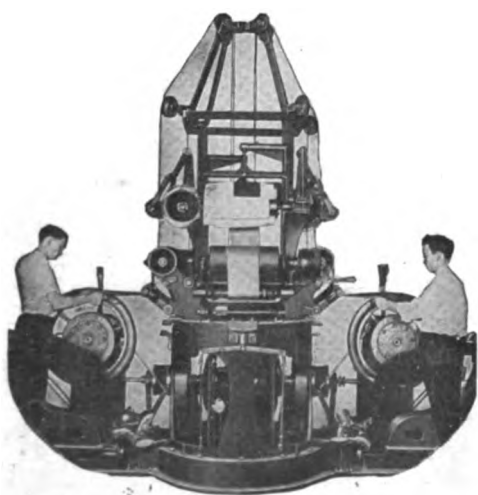
So between greater speed and greater durability, it is not strange that Goodyears have captured the good will of the great majority of motorcyclists. It is not strange that thousands of experienced riders give them the preference.

Built on Tire Machines By No-Rim-Cut Experts

Goodyear Motorcycle tire riders do not fall heir to the troubles that overtake riders of hand-made tires.

For Goodyears are made by a scientific method on the Goodyear tire building machine. This machine forever does away with the danger of human mistakes creeping into the construction of the tire. It builds a tire that is absolutely flaw-proof.

This is the same machine on which experts build the



GOODYEAR
AKRON, OHIO
Motorcycle Tires

NO-RIM-CUT AUTO TIRES, tires whose sales have leaped to over a million and a half. And like No-Rim-Cuts, these Motorcycle tires render unequalled service—set the pace for all other motorcycle tires.

Every Manufacturer Has Made Contracts With Us

These Motorcycle tires are dependable. They mean reliable motorcycle service. Every concern in America manufacturing Motorcycles has made contracts for these tires.

Most Durable, Yet Most Economical

No Motorcycle tires render riders such freedom from blow-outs, punctures, and tire troubles as do these machine-made tires. Yet they cost you no more than common tires.

To save money and tire troubles you should by all means insist on Goodyears.

Write for Our Book on Motorcycle Tires

Goodyear pneumatic tires are guaranteed when filled with air at the recommended pressure. When filled with any substitute for air our guarantee is withdrawn.

BULLETIN:

Another Record Smashed: Cleveland, Ohio, August 25th—Don Klark, at North Randall Track, in one hundred mile open, made new dirt track record on Goodyear Tires, covering distance in 95 minutes, ten seconds. Of six entries all but one were on Goodyear Tires.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

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THURSDAY, SEPTEMBER 19, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
19

For 1913— **35,000 Indian Motorcycles!**

To produce this number of machines for the supply of Indian dealers, we placed our contracts for material last Spring. Deliveries were made commencing July 1st. At the same time we contracted for new machinery to be installed in the addition to our plant. Deliveries were made before the completion of the building operations.

With our increased manufacturing facilities, we are endeavoring to take care of the requirements of Indian dealers when the purchaser requests delivery.

Over 1,300 skilled mechanics are now employed in the Indian factory, each one a specialist in some branch of motorcycle construction.

Our 1913 agency contract season starts November 1st. If you are desirous of handling Indian Motorcycles, write us now.

Over 19,000 Indians of the 1912 model, all sold through dealers, are now on the road.

THE HENDEE MFG. COMPANY, Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

LONDON

"Count the Indians on the Road!"

What Goodyear Tire Machines Afford Motorcycle Riders

MOTORCYCLISTS on all sides appreciate the *security* and the *saving* offered by Goodyear Motorcycle Tires.

These tires—the most durable made—have back of them a mighty organization. This organization renders a perfect service. This service is delivered through our innumerable branches and agencies which bring riders in hundreds of localities into close touch with the factory.

Such service, with such tires, makes Goodyear quality worth any man's while.

Riders—thousands of them—are insisting on *Goodyear Motorcycle Tires*.

Every American Motorcycle Manufacturer—30 in all—has made contracts for these tires.

For countless tests have proved these the most *durable* tires in existence.

The durability of these premier motorcycle tires is due to the materials of which they are made and the *way* they are made.

Thirteen years of Automobile Tire Building experience has taught us that it pays to use only the best of rubber and the best of fabric in our tires. None better than that used by us can be procured.

**Tires That
Stand Abuse**

GOODYEAR
AKRON, OHIO
Motorcycle Tires

**Extra Quality
Priced the Same**

Out of our years of experience we evolved a more scientific way of building a tire. We invented machines for the purpose of building our tires.

These machines—the same as those on which are built the famous No-Rim-Cut Automobile Tire—banish a fault common to all hand-made tires.

Instead of a tire built up of unequally stretched plies of fabric, you now have one that is absolutely uniform in tension—and in strength.

Instead of a tire apt to blow out any time because of hidden weak spots, you now have a tire whose construction is absolutely safeguarded against these weak spots.

Instead of a tire that may be a constant source of trouble, you now have one that thousands of riders will tell you is a constant source of satisfaction.

And all because of the service built into the tire by the machines we have invented and use.

Yet these machine-made motorcycle tires—these tires that render dependable service, cost riders no more than other kinds. Our enormous output has permitted us to pare the costs down to the quick. Riders can now obtain **Quality** tires at a **Quantity** price.

Realize that defective tires render useless the best motorcycle on earth.

Realize that here are tires vouched for by the greatest known authorities.

Realize that Goodyear Motorcycle Tires under every known condition of service are accomplishing more than all other tires put together.

Then choose the tires which you feel will best serve your own interest.

Write Today for Book on Motorcycle Tires
Goodyears Hold All World's Records, Amateur and Professional

BULLETIN: Huntsberry on Goodyear Motorcycle Tires establishes new track record Cleveland Motordrome.
Distance 5 miles in 3 minutes 58 seconds.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

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THURSDAY, OCTOBER 3, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
20

Classic Motorcycle Race of France

WON BY

The *Indian* Motorcycle



THE Grand Prix of the Motorcycle Club of France was won this year by the Indian, ridden by O. Godfrey.

Two other Indians finished third and sixth. The Indian entry also carried off the team prize in this contest. The course was 450 kilometers, about 280 miles.

Last year, it will be recalled, the Indian made a clean sweep in the English Classic Motorcycle event, the Tourist Trophy Endurance Contest. The Indian Machines finished "ONE—TWO—THREE."

THE HENDEE MFG. COMPANY, Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

LONDON

"Count the Indians on the Road!"

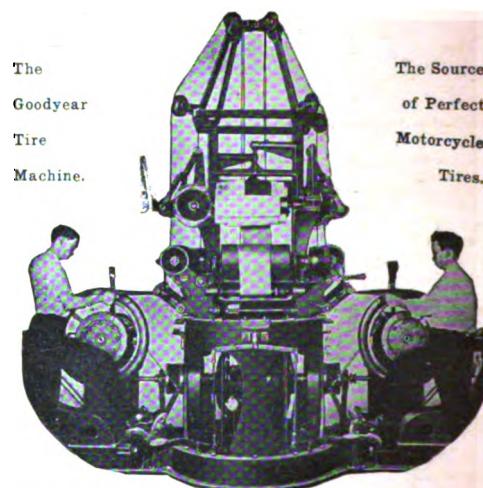
Wherever You Find Motorcycles There You Find Goodyear Tires

A glance at the tire equipment of the rows of motorcycles parked at races and elsewhere would make it appear that about every other single-tracker is Goodyear equipped.

The popularity of Goodyear Motorcycle Tires is one of the mightiest arguments supporting their now recognized superiority. The vast majority of motorcyclists are too practical-minded to adopt these tires so universally if they didn't render unusual service.

Nor would all the manufacturers—30 in all—have made contracts for these durable tires, had it been otherwise.

These tires—results of over 13 years' tire building experience—have solved the tire problem for both riders and manufacturers. Are they solving your tire problem?



A Knock-Out Blow for Blow-Outs

The constant danger of punctures and blow-outs has been practically eliminated by Goodyear Motorcycle Tires.

Manufacturers can now send out machines knowing the tires will give their full quota of efficiency.

Riders, no matter what roads they travel, no matter what the special duty they demand of their machines, no matter whether single or tandem, can now ride tires of **proved service**.

All because we have learned how to build endurance into motorcycle tires.



We have been building tires for over 13 years. The Goodyear No-Rim-Cut—with sales of over a million and a half—is the greatest triumph of tiredom.

And now we have motorcycle tires that are just as good as No-Rim-Cuts—tires that countless tests prove to be the most durable tires in existence.

Machine-Made Tires

From our long years of experience, we invented **machines** with which to build tires.

These machines produce tires, which, unlike hand-made tires, are absolutely free from the mechanical imperfections that result from an **unequal stretching** of the plies of fabric forming the tires.

These machines stretch on each and every ply with scientific accuracy. One is no tighter—nor looser—than another. The tire, uniform in **strength** because uniform in **tension**, **LASTS**—gives the service to which every motorcyclist is entitled.

WRITE FOR BOOKLET ON MOTORCYCLE TIRES

Do Most—Cost Least

Goodyear Motorcycle Tires cost no more than other tires. They actually cost less because they have reduced tire **up-keep** to a minimum, because they give **maximum service**. They are most economical because they last longest.

And remember, they are endorsed and used by the **greatest riders**—by the greatest tire authorities known, including the 30 big manufacturers who have made contracts for them.

Don't you think such tires are worthy of your investigation?

Hold Every World's Record

TELEGRAM! Another Astounding Proof of Goodyear Durability.

"Goodyears one, two, three in 24-hour race, Brighton Beach Motordrome. Lochnar and Shields, first, 1,374 miles two laps. Second, McNiel and Eckel, 1,371 miles. Third, Chapple and Wray, 1,365 miles. Winners have driven their tires through one-hour race, thirty-mile race, fifty-mile race and this race without removing same. Had only one tire to go bad in this race, this due to carelessness in mounting same. Most wonderful tire endurance test in world's history."

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

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THURSDAY, OCTOBER 17, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
21

THE 1913 ANNOUNCEMENT

OF

The *Indian* Motorcycle



will appear in this publication the last week in October, and will be of extraordinary interest to the trade and motorcycle riders in general.

The 1913 Indian embodies improvements which will not only insure the retention of its supremacy, but will place it on the very pinnacle of motorcycle design and construction.

As an example of what can be accomplished in perfecting the efficiency of the machine and the ease and comfort of the rider, the 1913 model of the Indian Motorcycle surpasses all expectations.

THE HENDEE MFG. COMPANY, Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

ATLANTA

LONDON

"Count the Indians on the Road!"

What Men Have Decided Who Think for Themselves

Goodyear Motorcycle Tires Their Final Choice

For 13 years, we have been building tires. Out of this experience, we have evolved remarkable tires for motorcycles—tires in which motorcyclists who think for themselves have found the solution to the tire problem.

They have found tires that render the utmost of service. For these motorcycle tires excel in resiliency—excel in durability.

Their superiority has been demonstrated by an almost uninterrupted series of track victories—

victories which include the winning and the holding today of every world's record, amateur and professional.

And tests without number have proved Goodyears the most durable tires in existence.

So naturally men everywhere are turning to these tires. For they are tires of proved service—tires that practically end the liability of tire trouble—tires that treble the pleasure of motorcycling.

The Great MACHINE BUILT Tires

All Goodyear Tires must measure up to the high standard of quality set by the now famous Goodyear No-Rim-Cut Automobile Tire.

No tire built by ordinary methods could do this. No hand-built tire could possibly stand the Goodyear tests.

But machine-built tires can.

So our motorcycle tires are built on Goodyear tire machines—the same machines that built such spectacular durability into No-Rim-Cuts.

Most Durable Built Without Flaws

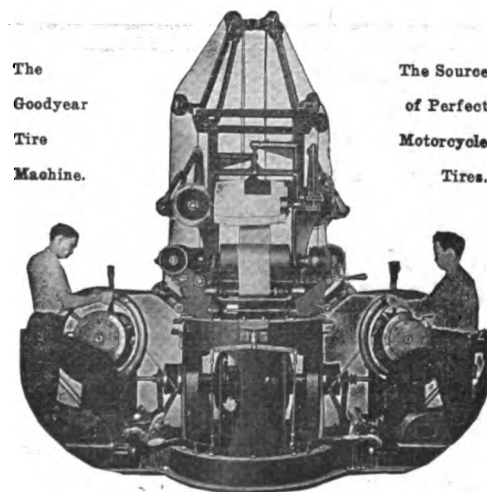
These machines are marvels of precision and accuracy. They stretch each ply at exactly the same tension. No too loose plies to shirk their duty. No too tight plies to break down under the unequal strain.

The result is a tire that is uniform in tension—uniform in strength and absolutely free of the flaws that make hand stretched tires uncertainties.

Backed By 13 Years

This is the only sure way of building Sure tires. And built thus out of the materials that our 13 years of experience has taught us guarantees most service, these tires guarantee their riders

most satisfaction—a satisfaction that two out of every three riders will experience the coming year.



The Popular Tire

For the majority of riders will ride Goodyears. Every motorcycle manufacturer has contracted for them for their next year's output. And riders on all sides are demanding of their dealers these more dependable, vastly more economical motorcycle tires.

Why Sacrifice Service?

Thousands of riders have learned the folly of accepting tire uncertainty and the wisdom of insisting upon Goodyears. They have learned that it is no longer necessary to sacrifice service for the sake of economy.

For Goodyear Motorcycle Tires, proven and dependable as they are, yet cost no more than riders expect to pay for a standard equipment.

If the advantages of such tires appeal to you, let us send you our book on Motorcycle Tires.

**Write for our Motorcycle
Tire Book Today**

BULLETIN :

"At Birmingham, Alabama, Sunday, October 6th, Balke wins first 10-mile race over Wolters and Joyce; time, 8:51½. 10-mile race, second event, over same course, same winner; time, 8:44. All machines Goodyear equipped."

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

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THURSDAY, OCTOBER 31, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
22



In this issue appears the 1913 Announcement of
The Indian Motorcycle

See pages 1, 2, 3, 4, 5, 6, 7, 8

THE HENDEE MFG. COMPANY, Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO: 1251 Michigan Ave. DENVER: 138 16th St. SAN FRANCISCO: 231 Van Ness Ave.

ATLANTA: 457 Peachtree St.

LONDON: 184 Gt. Portland St.

"Count the Indians on the Road!"

The End of Aggravation Relief in Goodyear Motorcycle Tires

Tires that at once free riders from the tire trouble bugbear and save money.

Tires that are the utmost in easy riding qualities.

Tires that hold every world's amateur and professional **SPEED** record.

Tires proved by countless tests to be the most serviceable, the most durable motorcycle tires in existence.

Tires made by the makers of No-Rim-

Cuts, and up to the standard of these famously long-lasting automobile tires.

Machine made tires—tires that motorcycle manufacturers everywhere have contracted for—that two out of every three riders will ride in 1913—yet that cost no more than ordinary tires.

Such are Goodyears—the motorcycle tires of service. You pay for this service! If you are not getting it, why don't you?



The Perfected Tire

Motorcyclists can now have dependable tires—tires that as perfectly meet the demands of the motorcyclist as the best-known auto tire meets the demand of the automobilist.

Goodyear Motorcycle Tires are in reality small auto tires. They have over 13 years of auto-tire building experience back of them, and are made by the same experts who have perfected Goodyear NO-RIM-CUT Auto Tires.

The Goodyear tire machine, one of the evolutions of these thirteen years of experience, is an important factor

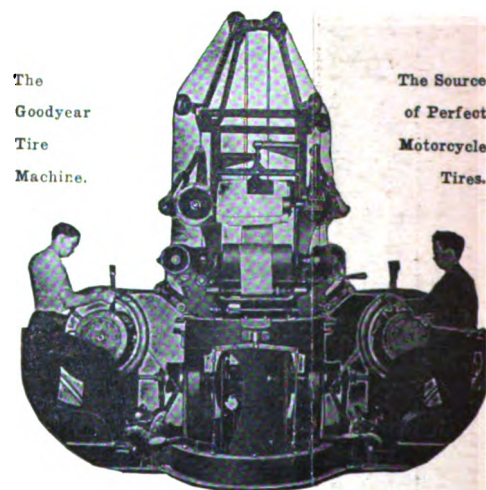
entering into the durability of our motorcycle tires.

This machine abolishes the possibility of flaws that are bound to creep into the common tire—the tire that is stretched by hand.

For this machine stretches on every layer of fabric with absolute **uniformity of tension**. No matter how big or little, strong or tired the operator is, the tire machine does its work without the slightest variation.

The result is a tire that the world recognizes today as being the leader—a tire that practically ends the aggravations of tire trouble.

A tire that has proved the most durable motorcycle tire in existence; a tire that reduces the danger of punctures and blow-outs, that minimizes tire cost, that affords riders the very max-



imum of service at the price they pay for common tires.

Six Great Tires—One For Every Road Condition.

Write for our Book on Motorcycle Tires

BULLETIN:

"At Pawtucket, R. I., Driving Park, October 19th, two professional and two amateur five mile races won on Goodyear Blue Streak Tires. 99% of motorcycles at Pawtucket Driving Park using Goodyears."

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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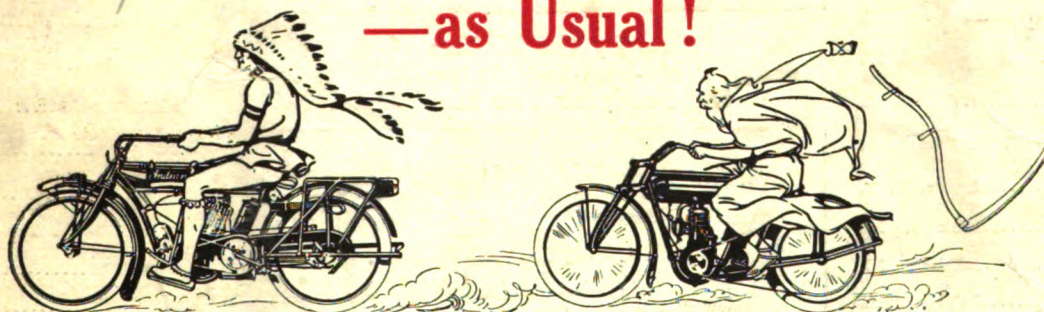
Vol.
7

THURSDAY, NOVEMBER 14, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
23

One Year Ahead in Improvements
—as Usual!



The Indian Motorcycle for 1913

Study the improvements in the 1913 Indian. Every rider of a motorcycle will be quick to realize the benefits of the Indian Cradle Spring Frame.

All 1913 Indians will be chain driven, and the reason is apparent. Wherever motorcycles are manufactured the former exclusive belt-drive makers are now recognizing the chain drive.

But one important fact stands out: the success of the Indian chain drive is due entirely to the Indian Free Engine Clutch. Learn more about it.

"Count the Indians on the Road"

THE HENDEE MANUFACTURING CO., Springfield, Vt.
(Largest Motorcycle Manufacturers in the World)

CHICAGO: 1251 Michigan Ave. DENVER: 138 Sixteenth St. SAN FRANCISCO: 234 Y
ATLANTA: 457 Peachtree St. LONDON: 184 Gt. Portland St.

Our Great Sign-up for 1913

Goodyears—the Popular Motorcycle Tires

GOODYEARS—

The machine made motorcycle Tires—have changed men's ideas on Motorcycle Tire service. What used to be the standard of quality no longer is. These tires have raised it. Two years of uncontended leadership. Thousands of tests of all kinds and the unqualified endorsement of these tires by the great authorities below prove them the most serviceable Tires in existence. Read the names of the manufacturers we have lined up and signed up next year for Goodyear Motorcycle Tires.

We Have Made 1913 Contracts With

Allied Motor Co.
AMERICA.....Chicago, Ill.
American Motor Co.
M. & M.....Brockton, Mass.
Aurora Automatic Mch. Co.
THOR.....Aurora, Ill.
Black Hawk Mfg. Co.
BLACK HAWK.....Rock Island, Ill.
Consolidated Mfg. Co.
YALE.....Toledo, O.
Davis Sewing Mch. Co.
DAYTON.....Dayton, O.
Emblem Mfg. Co.
EMBLEM.....Angola, N. Y.
Excelsior Motor Mfg. & Sup. Co.
EXCELSIOR.....Chicago, Ill.
Excelsior Cycle Co.
DE LUXE.....Chicago, Ill.
Flanders Mfg. Co.
FLANDERS.....Chelsea, Mich.
Harley-Davidson Motor Co.
HARLEY-DAVIDSON.....Milwaukee, Wis.

Goodyear Motorcycle Tires are looked upon as the Kings of Motorcycle Tiredom. And it is no wonder. For they are built by the world's master automobile tire builders.

13 years of tire building experience has taught us this about tires: That the best materials on earth are no guarantee of

GOOD YEAR
AKRON, OHIO
Motorcycle Tires

Made By the Makers of
Goodyear No-Rim-Cut Automobile Tires
On Goodyear Tire Machines

BULLETINS:

Goodyear Tires won all nine events, Los Angeles Stadium, October 10th. W. G. Hamilton lowered two mile record to 1:52 1-5.

Goodyear Motorcycle Tires score distinct success in Los Angeles Races Nov. 3rd. Won all ten races. Graves and Frankenstein taking most honors. Exceptionally fast time. Stock tires in every case.

enduring service unless the right building methods go with them.

We picked the right materials. And we invented the right method to assemble these materials into durable tires—we invented the tire machine.

The tire machine—the same on which we build Goodyear No-Rim-Cut Automobile

We Have Made 1913 Contracts With

Hendersen Motorcycle Co.
HENDERSON.....Detroit, Mich.
Ives Motorcycle Corporation.
MONARCH.....Owego, N. Y.
Iver Johnson Arms Co.
IVER JOHNSON.....Fitchburg, Mass.
Miami Cycle & Mfg. Co.
MERKEL.....Middletown, O.
Minneapolis Motorcycle Co.
MINNEAPOLIS.....Minneapolis, Minn.
New Era Auto Cycle Co.
NEW ERA.....Dayton, O.
Pope Mfg. Co.
POPE.....Hartford, Conn.
Reading-Standard Mfg. Co.
READING-STANDARD.....Reading, Pa.
Schickel Motor Co.
SCHICKEL.....Stamford, Conn.
Triumph Mfg. Co.
TRIUMPH.....Detroit, Mich.
Waverley Mfg. Co.
P. E. M.....Jefferson, Wis.

Tires—affords the only known method by which plies building up the tire can be stretched on at a uniform tension.

This uniform tension means uniform strength and the complete and absolute elimination of weak spots which in hand-made tires invite tire trouble, blow-outs and disaster.

HOLDERS OF EVERY WORLD'S

Some men want tires for every-day riding. They want tires for ordinary service that hold up and forget. Such are proved by comparative tests tires in existence. Here they are the best tires in the

world. Every world's record, both amateur and professional, is held by Goodyear Motorcycle Tires.

Practically every race entered is another triumph for Goodyears.

Here are the tires that stand supreme TODAY—tires that lead in durability, in

RECORD

speed, in popularity, in everything that points to perfection. Why don't YOU have them?

Goodyears are guaranteed to satisfy. They cost no more than any standard tire. Five tires in all—one for every road condition. Investigate them.

WRITE FOR OUR BOOK ON MOTORCYCLE TIRES

R TIRE & RUBBER COMPANY, AKRON, OHIO

Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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THURSDAY, NOVEMBER 28, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
24

What Kipling Said About Imitators:

"They copied all they could follow,
But they couldn't copy my mind,
And I left 'em sweating and stealing
A year and a half behind."
—Kipling.

The 1913 Indian Motorcycle

We are advertising "11 IMPORTANT NEW FEATURES" in the 1913 models of the Indian. But in addition there are no less than 29 new minor features.

We call these "refinements." But on some other makes they would be loudly proclaimed as IMPROVEMENTS.

And mark this: The Indian models for 1913 were finally approved eighteen months ago. So that the machine you buy now is precisely the same as advertised in our 1913 Announcement, the same machine which will be exhibited at the motorcycle shows and at 1500 agencies throughout the country.

Ever notice how many "new" models of other makes come out AFTER the Indian? Some of them are not even laid down till the Indian appears, while others make hasty revisions before Show time. Therefore watch for the counterfeits of original 1913 Indian features—as usual.

Prices: 4 H. P. Single, \$200. 7 H. P. Twin, \$250. F. O. B. Factory

Send for 1913 advance catalog.

THE HENDEE MANUFACTURING CO., Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

CHICAGO

DENVER

SAN FRANCISCO

ATLANTA

LONDON

Our Great *Sign-up* for 1913 Goodyears—the Popular Motorcycle Tires

Here Are The Manufacturers With Whom We Have Made 1913 Contracts

Allied Motors Corporation
A. M. C. Chicago, Ill.
American Motor Co.
M. & M. Brockton, Mass.
Aurora Automatic Mchy. Co.
THOR Aurora, Ill.
Black Hawk Mfg. Co.
BLACK HAWK Rock Island, Ill.
Consolidated Mfg. Co.
YALE Toledo, Ohio.
Davis Sewing Mach. Co.
DAYTON Dayton, Ohio.
Emblem Mfg. Co.
EMBLEM Angola, N. Y.
Excelsior Motor Mfg. & Sup. Co.
EXCELSIOR Chicago, Ill.
Excelsior Cycle Co.
DE LUXE Chicago, Ill.
Flanders Mfg. Co.
FLANDERS Chelsea, Mich.
Harley-Davidson Motor Co.
HARLEY-DAVIDSON Milwaukee, Wis.

Henderson Motorcycle Co.
HENDERSON Detroit, Mich.
Ives Motorcycle Corporation
MONARCH Oswego, N. Y.
Iver Johnson Arms Co.
IVER JOHNSON Fitchburg, Mass.
Marvel Manufacturing Co.
MARVEL Hammondsport, N. Y.
Miami Cycle & Mfg. Co.
MERKEL Middletown, Ohio.
Minneapolis Motorcycle Co.
MINNEAPOLIS Minneapolis, Minn.
New Era Auto Cycle Co.
NEW ERA Dayton, Ohio.
Pope Mfg. Co.
POPE Hartford, Conn.
Reading-Standard Mfg. Co.
READING-STANDARD Reading, Pa.
Schickel Motor Co.
SCHICKEL Stamford, Conn.
Triumph Mfg. Co.
TRIUMPH Detroit, Mich.
Waverley Mfg. Co.
JEFFERSON Jefferson, Wis.

Made by Makers of
Goodyear No-Rim-
Cut Automobile
Tires



Hold Every
World's Record;
Amateur and Pro-
fessional

GOODYEARS—the machine-made motorcycle tires—have changed men's ideas on Motorcycle Tire service. What used to be the standard of quality no longer is—these tires have raised it. Two years of uncontested

leadership, thousands of tests of all kinds and the unqualified endorsement of these tires by the great authorities above prove them the most durable—the most serviceable tires in existence.

Read above the names of the great concerns we have *lined* up and *signed* up for Goodyear Tires next year. Think what it proves about Goodyear Quality. Then ask us to send our booklet telling all.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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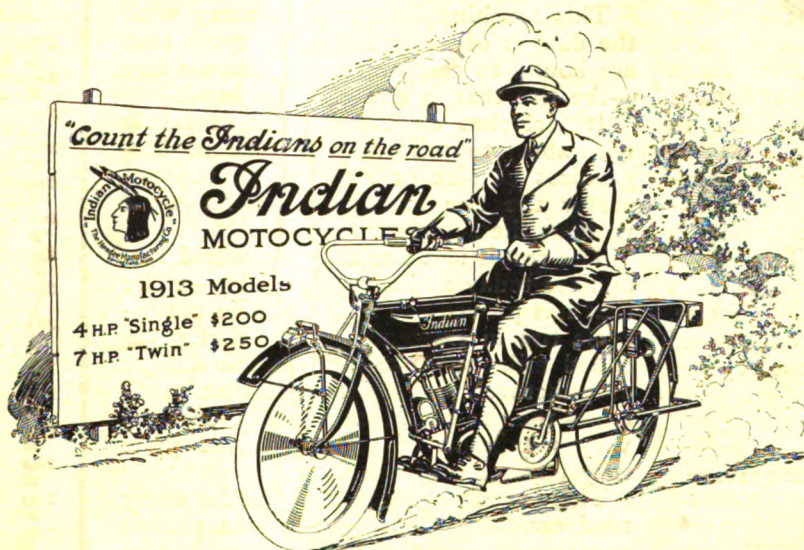
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A YEAR

Vol.
7

THURSDAY, DECEMBER 12, 1912

Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
25



The announcements of the 1913 Indian have created such a sensation throughout the country that dealers everywhere are at their wits' ends to know how to satisfy the clamor of intending purchasers for the first delivery in their locality.

THE SENSE OF PRIDE AND SATISFACTION UPON OWNING THE FIRST 1913 INDIAN IN YOUR HOME TOWN IS READILY UNDERSTOOD AFTER LOOKING INTO THE NEW FEATURES OF THIS TRULY SUPERB MOTORCYCLE.

Prices as shown above, F. O. B. Factory.

Drop postal for illustrated and descriptive 1913 literature.

THE HENDEE MANUFACTURING CO., Springfield, Mass.

(Largest Motorcycle Manufacturers in the World)

Branches and Service Stations

CHICAGO

DENVER

SAN FRANCISCO

ATLANTA

LONDON

Mr. Motorcycle Rider

Please Answer These Tire Questions

Why is it that the oldest and most experienced motorcyclists use Goodyear Motorcycle Tires?

And why have these tires been able to consistently win and hold every world's record, amateur and professional, as they are doing today?

And why have the motorcycle manufacturers listed below adopted these tires for 1913 as they have done?

We'll tell you why it is.

It is because these tires are by countless tests the most durable motorcycle tires in existence. They serve where others fail.

That is why they are favorites with men who would avoid tire troubles.

That is why they are able to stand up under the terrific strain of racing.

And that is why they have won contracts from these manufacturers — manufacturers who know that by adopting Goodyears they are increasing the service and the value of their own manufactured product.

Can you think of any reason why you shouldn't be getting the advantage of such exceptional tire service as this must be? We can think of none. For our prices are the same as any standard tire, and our branches and agencies are everywhere.

Let us tell you why these tires have come into such prominence:



Our Tires Are Built On Machines

We have been building tires for over thirteen years. During this time we have learned about all there is to know about successful tire construction. We have learned how tires should be built to endure.

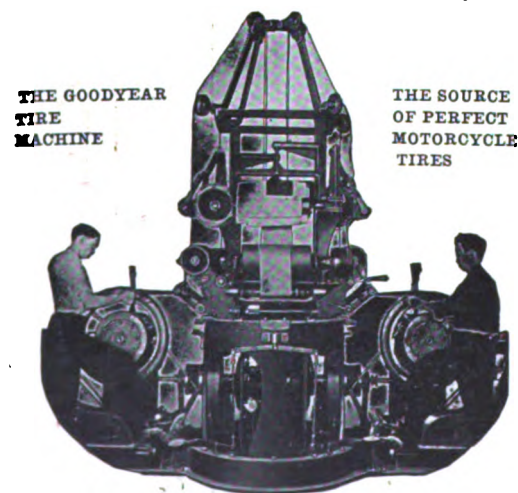
The Goodyear Tire Machine is an evolution of these thirteen years of experience. On these machines we build the famous No-Rim-Cut Auto Tire. No other method of building strength into pneumatic tires is so sure as this one. To it is now largely due the unequalled durability of these tires for motorcycles.

This machine forever does away with the danger of flaws and weak spots that are bound to creep into the common tire — the tire that is stretched by hand.

It stretches on every layer of fabric with absolute uniformity of tension. Regardless of size or strength of the operator the tire machine does its work without the slightest variation.

The result is a tire that the world recognizes today as being the leader—a tire that has proved the most durable motorcycle tire in existence—a tire that gives added mileage—that reduces the danger of punctures and blow-outs, that minimizes the tire cost, that affords riders the very maximum of service at the price they pay for common tires.

There are five great tires—one for every road condition. Every one is a proved success—an actual money saver. Let us tell you all about them. Write us or go see the nearest dealer.



THE GOODYEAR
TIRE
MACHINE

THE SOURCE
OF PERFECT
MOTORCYCLE
TIRES

Bulletin

Akron, Ohio, Nov. 27, 1912:

"Goodyear Tires first rank all four events at San Fernandino, California, November 28th."

Here are the Concerns who have Adopted Our Tires for 1913.

Allied Motors Corporation
A. M. C. Chicago, Ill.
American Motor Co.
M. & M. Brockton, Mass.
Aurora Automatic Mch. Co.
THOR Aurora, Ill.
Black Hawk Mfg. Co.
BLACK HAWK Rock Island, Ill.
Consolidated Mfg. Co.
YALE Toledo, Ohio
Davis Sewing Mach. Co.
DAYTON Dayton, Ohio
Emblem Mfg. Co.
EMBLEM Angola, N. Y.
Excelsior Motor Mfg. & Sup. Co.
EXCELSIOR Chicago, Ill.
Excelsior Cycle Co.
DE LUXE Chicago, Ill.
Flanders Mfg. Co.
FLANDERS Chelsea, Mich.
Harley-Davidson Motor Co.
HARLEY-DAVIDSON Milwaukee, Wis.
Henderson Motorcycle Co.
HENDERSON Detroit, Mich.
Ives Motorcycle Corporation.
MONARCH Owego, N. Y.
Iver Johnson Arms Co.
IVER JOHNSON Fitchburg, Mass.
Marvel Manufacturing Co.
MARVEL Hammondsport, N. Y.
Miami Cycle & Mfg. Co.
MERKEL Middletown, Ohio
Minneapolis Motorcycle Co.
MINNEAPOLIS Minneapolis, Minn.
New Era Auto Cycle Co.
NEW ERA Dayton, Ohio
Pope Mfg. Co.
POPE Hartford, Conn.
Reading-Standard Mfg. Co.
READING-STANDARD Reading, Pa.
Schickel Motor Co.
SCHICKEL Stamford, Conn.
Triumph Mfg. Co.
TRIUMPH Detroit, Mich.
Waverley Mfg. Co.
JEFFERSON Jefferson, Wis.

THE GOODYEAR TIRE & RUBBER COMPANY, MOTT ST., AKRON, OHIO

Branches and Agencies in 103 Principal Cities

We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits

Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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7

THURSDAY, DECEMBER 26, 1912

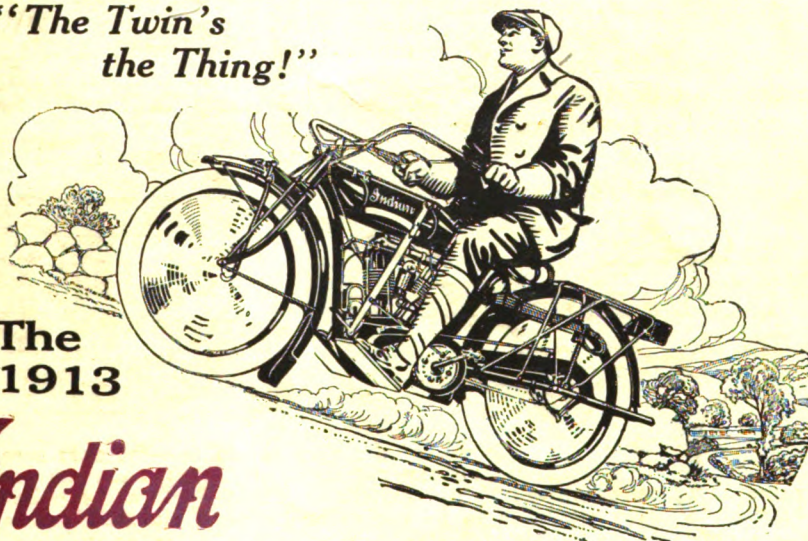
Issued Every Other Thursday by the Motorcycle Publishing Co., 51 Chambers St., New York

No.
26

*"The Twin's
the Thing!"*

The
1913

Indian



7 H.P. Twin Cylinder has the reserve power that carries you at any pace over any road. Through deep mud and sand and up steep, rough hills. Wonderfully smooth running motor.

New Cradle Spring Frame:—Equipped with recoil leaves and rubber bumpers. Positively no "bottom" to spring action. Normal working zone of 4 inches. Double scrolls at rear shackles, coming into action successively under light and heavy jolts. Hinged joint bracket has wide bearing surface, steel on steel. Oilers placed at all working points. Frame motion does not cramp chains. Rear seat-mast cluster a horseshoe-shaped steel casting of ample proportion for the service intended.

"A free demonstration from any of our 1500 dealers throughout the country. Wherever you ride, you're always in Indian Territory."

Prices { 4 H.P. Single, \$200 } f.o.b. Factory
 { 7 H.P. Twin, \$250 }

Write for free 1913 literature, describing all models and improvements.

THE HENDEE MFG. CO., Springfield, Mass.

CHICAGO

DENVER

Branches and Service Stations

SAN FRANCISCO

ATLANTA

LONDON, ENG.



Another "Line-up" for Goodyears—the Machine-Made Motorcycle Tires

The above is a reproduction of a photo taken recently at the Los Angeles Motordrome.

It shows that here Goodyears are the popular tires. And the same condition will be found to prevail wherever you go.

Men prefer these tires because of the service they render—because they are the most dependable tires. Dependability is the vital essential of tires for motorcycles.

Two years ago our motorcycle production was in its infancy—

But we have forged ahead, until now we are in the lead. Our this year's output is nearly 5 times greater than that of the year before. And 26 motorcycle manufacturers have adopted these tires for 1913.

Next year there will be, we figure, more Goodyear Motorcycle Tires in service than all other makes combined.

All because men have found them out.

By Countless Tests The Most Durable Tires In Existence



We have been building tires for over 13 years. The Goodyear No-Rim-Cut Automobile Tire is probably the best liked tire today. Its sales have gone considerably over the seventeen hundred thousand mark.

It took an enormous amount of testing and experimenting—an enormous amount of human energy—an enormous amount of expense to produce this tire. But it paid. For the No-Rim-Cut has been crowned king.

And now motorcyclists come in for their share of the profit. They get tires

that are made out of the very cream of all these years of experience. They get tires proved by our metered tire testing machines to be the most durable tires in existence. Yet these tires cost only what motorcyclists expect to pay for any standard make.

Goodyears are more than just durable tires. They are the fastest tires made. They hold every world's record, amateur and professional. Which would indicate that our experts had about solved the tire question.

We build our tires on tire-machines

—the only sure way of proofing a tire against the danger of weak spots due to an **un-uniform** stretching on of the fabric. This is one of the big factors entering into the wonderful success of these tires.

When tires outsell all others as ours do—when they hold all world's records, when they are adopted by 27 motorcycle makers—the best known authorities on tire-service, then there must be something **distinctive** about them—something that **must** make them worthy of your investigation!

A new book on Motorcycle Tires is now being printed. Let us enter your name for one of these books to be sent you gratis as soon as it is off the press.

The Goodyear Tire & Rubber Co. - - Akron, Ohio

Branches and Agencies in 103 Principal Cities We Make All Kinds of Motorcycle Tire Accessories and Repair Outfits
Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.

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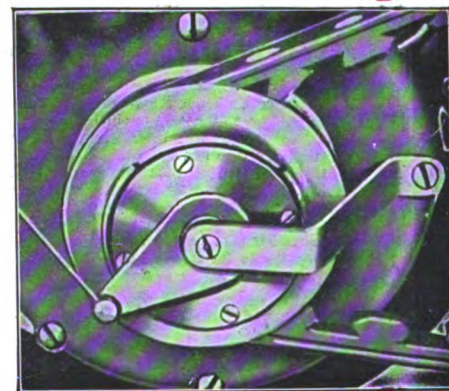
CONTROL!

ECLIPSE

There's a keen delight in the knowledge that your motorcycle is under your absolute control. The ability to curb your mount by a slight motion of the hand; at one moment crawling at a snail's pace—at another "burning up the road"; stopping and dismounting while the motor still throbs, ready to obey your every command—these are some of the delightful possibilities that the motorcycle affords, when it is equipped with the

ECLIPSE FREE ENGINE PULLEY and MULTIPLE DISC CLUTCH

No 1913 motorcycle will be without a Free Engine clutch of some sort. Watch the specifications of the leading manufacturers and see how prominently the Eclipse is displayed. It's a powerful asset to a motorcycle's reliability claims. You can rely upon the machine equipped with the Eclipse Free Engine Clutch because no manufacturer would be foolish enough to put such a high-class product as the Eclipse on an otherwise inferior machine.



ECLIPSE MACHINE CO.

Elmira, New York

H. T. ROBERTS, Selling Agent 538 So. Dearborn Street, Chicago, Ill.

When writing to advertisers, please mention MOTORCYCLE ILLUSTRATED.

Merry Christmas

Charles Dickens
Robert Louis Stevenson

Clement C Moore
James Whitcomb Riley
F Hopkinson Smith

Henry Van Dyke
Eugene Field

"My friends, my vely dear friends, I should say, for I omit none of you—befo' I kindle with the torch of my love these little beacons which are to light each one of us on our way until another Christmas season overtakes us; befo', I say, these sparks burst into life, I want you to fill yo' glasses!"—Col. Carter's Christmas Tree.—F. Hopkinson Smith.

"I don't know what to do!" cried Scrooge, laughing and crying in the same breath and making a perfect Laocöon of himself with his stockings. "I am as light as a feather. I am as happy as an angel. I am as merry as a schoolboy. I am as giddy as a drunken man. A merry Christmas to everybody! A happy New Year to all the world. Hallo, here! Whoop! Hallo!"

"He had frisked into the sitting room and was now standing there, perfectly winded.

"I don't know what day of the month it is," said Scrooge. "I don't know how long I've been among the spirits. I don't know anything. I'm quite a baby. Never mind. I don't care. I'd rather be a baby. Hallo! Whoop! Hallo here!"

"He was checked in his transports by the churches ringing out the lustiest peals he had ever heard. Clash, clang, hammer, ding, dong, bell. Oh, glorious, glorious! Running to the window he opened it and put out his head. No fog, no mist; clear, bright, jovial, stirring, cold; cold, piping for the blood to dance to; golden sunlight; heavenly sky; sweet, fresh air; merry bells. Oh, glorious. Glorious!"

"What's to-day?" cried Scrooge, calling downward to a boy in Sunday clothes.

"To-day!" replied the boy. "Why, Christmas Day."

"It's Christmas Day!" said Scrooge to himself. "I haven't missed it. The spirits have done it all in one night. They can do anything they like. Of course they can."—Dickens.

"To be honest, to be kind; to earn a little and spend a little less, to make upon the whole a family happier for his presence to renounce when that shall be necessary and not be embittered, to keep a few friends, but these without capitulation; above all, on the same grim condition, to keep friends with himself—here is a task for all that a man has of fortitude and delicacy. He has an ambitious soul who would ask more; he has a hopeful spirit who should look in such an enterprise to be successful."—Robert Louis Stevenson. A Christmas Sermon.

Probably more grown men and women can repeat to-day: "Twas the Night Before Christmas" than can remember any other poem of equal length in the language. They may have forgotten the name of the author, Clement C. Moore, but they can reel off the beginning glibly enough:

"Twas the night before Christmas and all through the house
Not a creature was stirring, not even a mouse;

The stockings were hung by the chimney with care

In hopes that St. Nicholas soon would be there;

The children were nestled all snug in their beds,

While visions of sugar plums danced in their heads.

And how these elocutionary lights, as well as the rest of us who are not vocally inclined, have revelled in Eugene Field's delicious "Jes' 'Fore Christmas."

"Father calls me William, sister calls me Will,

Mother calls me Willi—the fellers call me Bill!

Most all the time the hull year round there ain't no flies on me,

But jes' 'fore Christmas I'm as good as I kin be!

And the pious smugness with which this interesting imp concludes its unctuous joy to the soul of the reader:

But Christmas, with its lots and lots uv candies, cakes and toys,

Wuz made, they say, fur proper kids and not fur naughty boys!

So wash yer face an' bresh yer hair an' mind your p's and q's,

An' don't bust out yer pantaloons an' don't wear out yer shoes.

Say "yessum" to the ladies an' "yessir" to the men,

An' when they's company don't pass yer plate fur pie again;

But, thinkin' uv the things you'd like to see upon that tree,

Jes' 'fore Christmas be as good as you kin be!"

"They's a kind o' feel in the air to me When the Christmas time sets in

That's about as much of a mystery As ever I've run ag'in.

Is it the bleat o' the whistle and beat O' the little toy drums and blare

A' the horn? No! No! It is jest the sweet—

The sad-sweet feel in the air!"

James Whitcomb Riley.

"Hang up the baby's stocking;
Be sure you don't forget;
The dear little dimpled darling,
She ne'er saw Christmas yet."

Henry Van Dyke preaches another pretty good sermon in "The Spirit of Christmas," which was published seven years ago. He says there is something better than keeping Christmas Day, "and that is keeping Christmas. Are you willing to forget what you have done for other people and to remember what other people have done for you; to ignore what the world owes you, and to think what you owe the world, to put your rights in the background, your duties in the middle distance and your chance to do a little more than your duty in the foreground; to see that your fellowmen are just as real as you are, and try to look behind their faces to their hearts, hungry for joy; to own that probably the only good reason for your existence is not what you are going to get out of life, but what you are going to give, to life to close your book of complaints against the management of the universe, and look around you for a place where you can sow a few seeds of happiness—are you willing to do these things even for a day? Then you can keep Christmas."

"Are you willing to stoop down and consider the needs and desires of little children; to remember the weakness and loneliness of people who are growing old; to stop asking who much your friends love you, and ask yourself whether you love them enough; to bear in mind the things that other people have to bear in their hearts; to try to understand what those who live in the same house with you really want, without waiting for them to tell you; to trim your lamp so that it will give more light and less smoke, and to carry it in front so that your shadow will fall behind you; to make a grave for your ugly thoughts and a garden for your kindly feelings, with the gate open—are you willing to do these things even for a day? Then you can keep Christmas."

"Are you willing to believe that love is the strongest thing in the world—stronger than hate, stronger than evil, stronger than death—and that the blessed life which begun in Bethlehem nineteen hundred years ago is the image and brightness of the Eternal love? Then you can keep Christmas. And if you can keep it for a day, why not always?"

"And so, as Tiny Tim observed, God Bless Us, Every One!"

Says Longfellow:

"I heard the bells on Christmas Day
Their old familiar corals play.
And wild and sweet
The words repeat
Of peace on earth, good will to men!"

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